REPORT RESUMES

ED 003 170 64
EVALUATIONS OF SUMMER 1965 NDEA INSTITUTES, A REPORT
EVALUATING NDEA INSTITUTES FOR ADVANCED STUDY FOR EDUCATIONAL
MEDIA SPECIALISTS AND SCHOOL LIBRARY PERSONNEL.
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REPORT NUMBER NDEA-VIIB-571 PHASE 1 PUB DATE NOV 65
EDRS PRICE MF-$0.18 HC-$3.24 81P.

DESCRIPTORS- *INSTITUTE TYPE COURSES, *PROGRAM EVALUATION, *INSTRUCTIONAL MATERIALS, SCHOOL LIBRARIES, *INSERVICE TEACHER EDUCATION, INSTRUCTIONAL IMPROVEMENT, DISTRICT OF COLUMBIA, NATIONAL DEFENSE EDUCATION ACT INSTITUTES, EDUCATIONAL MEDIA INSTITUTE EVALUATION PROJECT

APPROXIMATELY 500 NATIONAL DEFENSE EDUCATION ACT INSTITUTES FOR ELEMENTARY AND SECONDARY SCHOOL TEACHERS WERE EVALUATED DURING THE SUMMER OF 1965. THE EDUCATION MEDIA INSTITUTE EVALUATION (EMIE) PROJECT EVALUATED (1) EDUCATIONAL MEDIA SPECIALIST INSTITUTES, (2) SCHOOL LIBRARIANSHIP INSTITUTES THAT EMPHASIZED THE INSTRUCTIONAL MATERIALS CENTER CONCEPT, AND (3) NEW MATERIALS INSTITUTES IN THE FIELDS OF ENGLISH, READING, MODERN FOREIGN LANGUAGES, GEOGRAPHY, AND HISTORY. RECOMMENDATIONS FOR FUTURE INSTITUTE ACTIVITIES WERE SUGGESTED. (JM)

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
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E M I E

EDUCATIONAL MEDIA INSTITUTE EVALUATION PROJECT

EVALUATIONS OF
SUMMER, 1965, NDEA INSTITUTES

a report evaluating
NDEA Institutes
for Advanced Study
for Educational Media Specialists
and School Library Personnel

November, 1965

ED 003170

Published by the

EDUCATIONAL MEDIA INSTITUTE EVALUATION PROJECT
434 EAST WILLIAM STREET, SAN JOSE, CALIFORNIA 95112

A Project of the Department of Audiovisual Instruction of the National Education Association under a Title VII-B Grant of the National Defense Education Act (Dr. Robert Snider, DAVI Liaison Representative)

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The work reported herein was performed pursuant to a contract with the United States Department of Health, Education, and Welfare, Office of Education, under the provisions of Title VII of the National Defense Education Act.

The views, conclusions, or recommendations expressed in this document do not necessarily reflect the official views or policies of agencies of the United States Government.

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Chapter 1

BACKGROUND AND PURPOSES

The National Defense Education Act of 1958, as amended by the 88th Congress (Public Law 88-665), includes in its Title XI authorization of funds for the fiscal year that ended June 30, 1965, and for each of the three succeeding years, to be used in arranging with institutions of higher education for the conduct of institutes for advanced study, including the use of new materials, to improve the qualifications of individuals who are:

(a) engaged in or preparing to engage in the teaching or supervising or training of teachers of history, geography, modern foreign languages, reading, or English in elementary or secondary schools;

(b) engaged in or preparing to engage in the teaching of disadvantaged youth;

(c) engaged as, or preparing to engage as, library personnel in elementary or secondary schools, or as supervisors of such personnel; or

(d) engaged as, or preparing to engage as, educational media specialists.

The program originating with this act has been characterized as "an effort at mass retraining of educational personnel." For the Summer 1965 period alone (the period covered by this report), 497 such institutes were authorized. Of these, 36 specialized in "educational media" matters; 26 were for school librarianship personnel.

Purposes of the EMIE Project

The Educational Media Institute Evaluation Project[1] was established primarily to identify important program elements that were thought to influence the effectiveness of the 36 educational media specialist institutes conducted during Summer 1965 and Summer 1966. But it was later expanded to include attention, also, to 13 of 26 school librarianship institutes for Summer 1965 that emphasized in their programs the "instructional materials center" concept in the work of school librarians. Finally, the EMIE Project was further expanded to include a study to sample the extent and quality of attention given to "advanced study of new materials" in institutes offered during Summer 1965 in the fields of English, reading, modern foreign languages, geography, and history, as well as for teachers of disadvantaged youth.

More specifically, then, the purposes of the EMIE Project were as follows:

1. To provide a single, accurate historical and statistical record of the educational media institutes for Summer 1965 and Summer 1966.

2. To facilitate improved planning for and the conduct of future institutes for media specialists and certain types of school library personnel.

3. To provide evaluations of both the immediate and relatively long-term influences upon participants in the "educational media" and "school librarianship" institutes of the type that emphasize instructional materials center development and operation.

4. To provide similar, but less comprehensive, evaluations of "new materials" outcomes for participants in a relatively small sampling of institutes for all of the other fields (English, reading, geography, history, disadvantaged youth, and modern foreign languages) represented in current institute programs.

5. To explore possibilities of developing and refining two evaluative instruments (one to measure basic knowledge and background and one to measure attitudes pertaining to "new media" selection, utilization, and management) during Summer 1965 for possible future use, as appropriate, with succeeding institutes.

Aspects of the EMIE Study

Evaluations of media specialist and selected librarianship institutes oriented toward the "instructional materials center" concept will be conducted twice during the 21-month period this present EMIE contract is in effect--once during Summer 1965 (reported in this PRELIMINARY REPORT), and again during Summer 1966. Analyses of several types of data will be made,[2] as follows:

1. Characteristics of institutes--similarities and differences in objectives, content, length, approach, learning activities, organization, uses of new materials, credit requirements and the like. These data are to be obtained through: (1) analyses of institute documents--such as reports of directors, program outlines, tests, assignment sheets, and similar items, and (2) on-site evaluation visits to 24 of 49 institutes in the study.

2. Characteristics of institute participants--their geographic origins, experience backgrounds, special interests, present and anticipated future new media responsibilities, amount and types of professional preparation, and the like. These data are to be obtained primarily from Part I of a PERSONAL INFORMATION FORM for use during Summer 1965 with 36 educational media and 13 school librarianship institutes and with a similar number during Summer 1966.

3. Characteristics and qualifications of professional institute staff members--their geographic origins, training, experience, qualifications, specialties, teaching experience. These data are to be obtained from analyses of institute directors' records and reports and, to some extent, from those of on-site visitors referred to above.

4. Characteristics and quality of institute instructional programs--based largely on reports of observations of on-site visitors and participant responses to questions in an end-of-institute information form.

5. Scope and quality of institute instructional resources--as judged by reports of on-site visitors and participant responses to questions in the end-of-institute information form.

6. Characteristics and quality of physical facilities, living-dining arrangements, and recreational programs--based upon on-site visitors' reports and responses to questions in an end-of-institute information form.

7. Status and changes in new media knowledge--what participants know about basic aspects of new media theory, research, utilization, production, sources, and administration as measured by an objective paper-and-pencil test.

8. Status and changes in new media attitudes--how participants responded to statements involving opinions and beliefs concerning new media applications in teaching.

9. Status and changes in new media interests and goals--based primarily upon analysis of responses to interest inventories administered during Summer 1965 to participants in 36 "media specialist" and 13 "instructional materials center" librarianship institutes. These inventories were used at the beginning and end of the Summer 1965 session. Participants were also asked to appraise the

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[1] With headquarters at 434 East William Street, San Jose, California.

[2] Not all the factors mentioned in this section will be analyzed in this PRELIMINARY REPORT. Their further consideration will be deferred to the FINAL REPORT, due January 1, 1967.

extent to which institutes aided them in achieving goals they regarded as important.

One further aspect of the evaluation plan for the EMIE Project (not reported here) involves assessing on-the-job influences of institute participants. For this portion of the study, it is proposed to send a questionnaire to approximately 2,000 individuals who participated in the Summer 1965 institutes studied by EMIE. A smaller sample (perhaps 10%) will be visited personally by institute directors or chief state school audio-visual officers in their particular localities. Special attention will be given to appraising participants' success in expanding and improving the quality of use of new media resources in the schools or school systems in which they are employed.

Educational Media Specialist Institutes

A total of 36 "educational media specialist" institutes have been involved, in one or another way, with the Summer 1965 EMIE study. Code numbers in parentheses following entries in this section denote the level of preparation required of participants; teaching levels the institute sought to serve are also indicated (K-12, etc.).

Code 1 institutes were intended primarily for applicants seeking advanced professional training who had an educational media background (master's degree, or its equivalent), a successful experience and a record of leadership in their profession, and a desire to update, specialize, or prepare for positions requiring increased proficiency.

Code 2 institutes were for applicants who had already demonstrated appropriate competence in one or more of the following areas: (a) selection and utilization of educational media, (b) curriculum development and coordination, (c) in-service education techniques, (d) production of educational media and materials, (e) organization and management of educational media services, and (f) research regarding educational media.

Code 3 institutes were for applicants with only minimal preparation and experience in media programs for which they have current responsibility or for which they sought to have responsibility during the 1965-66 academic year.

These three code numbers have been used as the classification device for assessing data contained in this report.

Four other types of classification were also included in NDEA guidelines for educational media specialist institutes. Institutes were planned, for example, as: (1) general preparation educational media personnel for service in a single building, (2) general preparation of educational media personnel for service in multiple building organizations (school districts, counties, regions, or states), (3) general preparation of educational media personnel for service either in a single and/or multiple building organization, and (4) special institutes--those dealing with a variety of subjects including the production of 8mm films, programmed instruction, educational uses of entertainment films, television production, and others.

General Preparation--Single Building. The following institutes* emphasized the preparation of media specialists for service in the single building:

*University of Connecticut, Storrs. 24 specialists (K-12). June 28-August 9. Carlton W. H. Erickson. (Code 3)

Eastern Illinois University, Charleston. 30 specialists (K-12). June 21-August 13. Verne Stockman. (Code 3)

University of Georgia, Athens. 30 specialists (K-12). June 14-July 22. G. E. Oliver. (Code 3)

Kent State University, Kent, Ohio. 40 specialists (K-12). June 27-August 7. John W. Mitchell. (Code 3)

*Michigan State University, East Lansing. 100 specialists (K-12). August 1-27. James L. Page. (Code 3)

University of Nebraska, Lincoln. 30 specialists (K-12). June 14-August 6. Robert Stepp. (Code 3)

The Ohio State University, Columbus. 50 specialists (K-12). June 14-July 23. Thomas E. Miller. (Code 3)

University of Oklahoma, Norman. 40 specialists (K-12). June 14-July 30. William R. Fulton. (Code 3)

*Oregon State University, Corvallis. 50 specialists (K-12). June 21-August 13. Curtis Reid. (Code 3)

Purdue University, Lafayette, Ind. 50 specialists (K-12). June 21-August 13. Carolyn I. Whitenack. (Code 3)

*San Jose State College, San Jose, Calif. 32 specialists (1-14). June 22-July 31. Harold H. Hailer. (Code 3)

Virginia State College, Petersburg. 35 specialists (K-12). June 14-August 6. Harry A. Johnson. (Code 2)

General Preparation--Multiple Building Organizations (District, County, Region, or State). The following institutes emphasized the preparation of media specialists for service in multiple school buildings (district, county, region, or state):

*Boston University, Boston, Mass. 30 specialists (K-12). June 21-July 30. Gaylen B. Kelley. (Code 2)

University of Colorado, Boulder. 40 specialists (K-12). June 14-July 23. Robert E. deKieffer. (Code 2)

*University of Hawaii, Honolulu. 50 specialists (K-12). June 21-August 2. Richard A. Sanderson. (Code 3)

*Institutes marked by asterisks were evaluated by "on-site visitors," described later.

Miami University, Oxford, Ohio. 20 specialists (K-12). June 21-July 23. James W. Taylor. (Code 3)

*University of Minnesota, Minneapolis. 30 specialists (K-12). July 12-August 20. Neville P. Pearson. (Code 3)

University of New Hampshire, Durham. 50 specialists (K-12). July 12-August 20. John D. Bardwell. (Code 3)

*University of North Carolina at Chapel Hill, Chapel Hill. 50 specialists (K-12). July 19-August 24. Kenneth M. McIntyre. (Code 3)

*University of North Dakota, Grand Forks. 25 specialists (K-12). June 21-August 13. George H. Voegel. (Code 3)

*University of Southern California, Los Angeles. 30 specialists (K-14). June 21-August 13. James D. Finn. (Code 1)

*Syracuse University, Syracuse, N.Y. 60 specialists (K-12). June 28-August 13. Eugene K. Oxhandler. (Code 2)

*University of Texas, Austin. 40 specialists (K-12). June 21-August 13. William G. Wolfe. (Code 2)

University of Wisconsin, Madison. 40 specialists (K-12). June 21-August 13. Maurice T. Iverson. (Code 3)

General Preparation--For Service in Either Single and/or Multiple Building Organizations. The following institutes emphasized general preparation of educational media specialists for service in either single and/or multiple building organizations:

East Carolina College, Greenville, N.C. 40 specialists (K-12). June 16-August 3. Richard S. Spear. (Code 3)

*Indiana University, Bloomington. 30 specialists (K-12). June 21-August 11. John A. Moldstad. (Code 1)

State University of New York, College at Oswego. 60 specialists (K-12). June 28-August 20. Theodore H. Beers. (Code 3)

Special Institutes. The following institutes emphasized specialized types of preparation of educational media specialists:

*Arizona State University, Tempe. Production of 8mm Self-Instructional Films. 33 specialists (K-12). June 21-August 7. Robert L. Baker. (Code 2)

*Columbia University, Teachers College, New York City. Self-Instructional Multilevel Materials and Automated Instruction. 40 specialists (K-12). July 26-August 13. Phil C. Lange. (Code 2)

*Fordham University, New York City. Feature and Documentary Films as Educational Media. 40 specialists (9-12). June 28-August 13. William K. Trivett, S.J. (Code 3)

George Peabody College for Teachers, Nashville, Tenn. 40 elementary school principals and supervisors (K-8). June 21-August 13. Curtis P. Ramsey. (Code 3)

University of Illinois, Urbana. Programmed Instruction and Verbal Language. 24 specialists (K-12). July 5-August 14. Lawrence M. Stolurow and Richard C. Anderson. (Code 2)

*Kansas State College of Pittsburg. Closed-Circuit TV Production. 20 specialists (K-12). June 21-July 30. Richard R. Shurtz. (Code 3)

Northwestern University, Evanston, Ill. Closed-Circuit TV Production. 30 specialists (K-12). June 21-July 30. Charles F. Hunter. (Code 3)

*The Pennsylvania State University, University Park. In-service Training for Media Specialists. 30 specialists (K-12). June 21-August 13. Gerald M. Torkelson. (Code 2)

College of the Virgin Islands, St. Thomas, V.I. Educational Problems in the Virgin Islands. 40 specialists (K-12). July 13-August 28. Douglas F. Rodgers. (Code 3)

School Librarianship Institutes

Of the total of 26 institutes for school librarianship institutes, in all, 13 were chosen for study by the EMIE Project. Several criteria were involved in this selection: (1) the institute was recommended for study by members of the NDEA institute administration staff of the U.S. Office of Education, (2) the institutes involved gave considerable attention to the "instructional materials center" concept (as opposed to the single-purpose "book library") in its proposal and title, (3) the exigencies of the calendar could be accommodated--especially important in view of the lateness with which the EMIE Project itself was authorized and funded, and (4) a reasonable distribution of geographic locations could be obtained.

Code symbols for the 13 selected institutes are as follows:

Code 1 denotes institutes for school library supervisors and/or school librarians possessing a degree in library science or its satisfactory equivalent.

Code 2 denotes institutes for school librarians with 15 or more semester units of library education.

Code 3 denotes institutes for school librarians with less than 15 semester hours of library education.

* Institutes marked by asterisks were evaluated by "on-site visitors," described later.

Code 1 Institutes Studied. The following Code 1 institutes* were studied as part of the EMIE Project:

*Western Michigan University, Kalamazoo. Development and Supervision of Instructional Materials Centers. 25 librarians (K-12). June 21-July 30. Esther M. Carter. (Code 1)

*University of Minnesota, Minneapolis. Development and Use of Multi-Media Library Collections. 30 librarians (1-12). June 28-August 6. Lowell E. Olson. (Code 1)

*University of Washington, Seattle. The School Library Supervisor in the Modern Educational Program. 40 librarians (K-12). July 19-August 20. Mabel Turner and Irving Lieberman. (Code 1)

Code 2 Institutes Studied. The following Code 2 school librarianship institutes were studied:

East Tennessee State University, Johnson City. The Instructional Materials Center. 30 librarians (K-12). July 19-August 20. Elsie Barrett. (Code 2)

*Indiana University, Bloomington. The Library in the Modern School. 40 librarians (K-12). June 22-July 31. Margaret Rufsvold. (Code 2)

Queens College, City University of New York, New York. Elementary School Library Service for Disadvantaged Children. 45 librarians (K-8). July 1-August 12. Barbara V. Olson. (Code 2)

Texas Women's University, Denton. Selection and Use of School Library Collections. 30 librarians (K-12). June 14-August 6. Genevieve Dixon. (Code 2)

Code 3 Institutes Studied. The following Code 3 school librarianship institute was studied:

Boston University, Boston, Mass. The Instructional Materials Center. 30 librarians (K-12). July 12-August 20. Lorraine E. Tolman. (Code 3)

Combination Institutes Studied. The following combination institutes (those coded with more than one number, as indicated) were also studied:

North Texas State University, Denton. Newer Educational Media for School Librarians. 30 librarians (K-12). June 3-July 14. Sarah Law Kennerly. (Code 1,2)

*State University of New York at Albany. Developing and Supervising Instructional Materials Centers. 40 librarians (K-12). July 5-August 6. Susan S. Smith. (Code 1, 2,3)

*University of Oregon, Eugene. School Libraries and Contemporary Educational Concepts. 50 librarians (1-12). June 21-August 13. Margaret Lane. (Code 2,3)

University of Wisconsin, Madison. Changing Education and the Changing School Library. 30 librarians (K-12). June 21-August 13. Gladys Louise Cavanagh. (Code 1,2)

Scope of Concern with "New Materials"

The terms, "new materials" or "new media," are meant, in this report, to include items in any or all of the following categories:

Printed

Enrichment reading (primarily books)
Basic and supplementary textbooks
Reference and source books
Magazines and newspapers
Pamphlets and other vertical file materials
Microcards or microfilms
Programmed materials (books, booklets, machines)
Professional teacher aid materials (library types)

Audio

Tape recordings (pre-recorded; recorded locally)
Disk recordings (phonograph records)

Graphic and Photographic

Maps and globes
Flat picture sets
Filmstrips (silent and sound)
16mm and 8mm films
2" x 2" slide and slide sets
Large transparencies (singles and sets)
Art prints

Other

Television programs
Kits (multi-media units)
Specimen collections
Community resources file
Models and mockups
Exhibits and displays

Various kinds of technological equipment are required in using the above materials. Types with which nearly every elementary or secondary teacher should be acquainted and thus have some skill in operating include the following:

Projectors

8mm and 16mm film
2" x 2" slide
Filmstrip
Large transparency (overhead)
Opaque

Audio-TV

Tape recorders
Disk playbacks (phonographs)
Videotape recorders
Image magnifiers

Photographic

Still camera (35mm, for example)
Motion picture cameras (16mm and 8mm)
Reproduction equipment (Thermofax, Xerox, Verifax, as examples)

Teaching Machines

Of various types

* Institutes marked by asterisks were evaluated by "on-site visitors," described later.

Data Sources

Data for this PRELIMINARY REPORT came from several sources, as follows:

PERSONAL INFORMATION REPORT FORM: SECTION I, BACKGROUND INVENTORY. A machine-processed instrument designed to obtain from approximately 1,800 Summer 1965 institute participants data concerning their past and present employment, future vocational plans, age, sex, marital status, number of dependents, credentials or certificates held, previous education, present and anticipated involvement with "educational media" activities, professional organization membership, and record of course completion in the "new media" field. Data derived from this source are presented, for the most part, in Chapter 3 following.

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PERSONAL INFORMATION REPORT FORM: SECTION II, INTEREST INVENTORY (BROAD GOALS), and SECTION III, INTEREST INVENTORY (SPECIFIC GOALS). Distributed with Section I of this form (described above) and completed twice by approximately 1,800 participants in Summer 1965 institutes studied in the EMIE Project. Section II described a number of possible broad goals related to typical employment situations for educational media personnel and requested, for each, a rating as to its importance to the participant and his estimated present competence with respect to it. The second administration (post-institute) used identical items and requested a second estimate of present competence as well as a rating of the importance of the item in the participant's anticipated assignment for 1965-66. Data derived from the use of this instrument are discussed principally in Chapter 5 following.

Section III of the instrument provides an inventory of participant interest in various specific goals related to uses of educational media. It, too, was administered twice--at the beginning and end of institutes studied. With the first administration, participants were asked to indicate, for each item, the current level of knowledge or skill and their interest in improving their performance with respect to it. With the second administration, and for identical items, they were asked to estimate their current level of knowledge or skill and to indicate how well, in their estimation, the activities were covered in the institutes attended. Data from the use of this instrument are discussed principally in Chapter 3 following.

●

PERSONAL INFORMATION REPORT FORM (POST-INSTITUTE): SECTION I, INSTITUTE EXPERIENCES. A machine-processed rating sheet used at the conclusion of Summer 1965 institutes and containing 28 items calling for judgments related to various aspects of institute experiences--housing, food, recreation, physical facilities, value of institute content, adequacy and availability of instructional resources (including equipment), capability of instructors, realization of institute objectives, contributions of visiting specialists, and institute work load. Free response spaces were also provided in which to record suggestions for the general improvement of future institutes. Data from this source are discussed principally in Chapter 4.

●

NEW MEDIA INFORMATION TEST. A test developed experimentally for use during Summer 1965 by Mr. Richard C. McLaughlin, Syracuse University, under the guidance of Dr. Eugene Oxhandler of the same institution. The primary purpose of this first use was to determine the feasibility of obtaining data on which to base further improvement of useful test items. It was hoped that a working test of sufficient length and coverage might result and that, if feasible and desirable, this test might be offered for use in screening applicants for future NDEA institutes. It was also thought that, if comparable forms of the test were developed, they might be useful in estimating pre-institute and post-institute levels of participant achievement. The background pertaining to the development of two versions of this test, their uses in selected institutes during Summer 1965, and the results obtained are discussed by Mr. McLaughlin in Chapter 5 following.

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NEW MEDIA ATTITUDES SCALE. A Likert-type scale applied to 39 statements representing varying points of view with respect to new educational media concerning which there is held to be some controversy in American education today. Participants were asked to "assume no pose, but respond rapidly according to your degree of agreement" with the statements. Categories of response ranged from "very strong disagreement" to "very strong agreement." This scale was administered twice in selected institutes--during the first and last weeks of the sessions. Results of its use are discussed in Chapter 5. Dr. Curtis Ramsey, George Peabody College for Teachers, was responsible for and reports this phase of the study.

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ON-SITE VISITORS' REPORTS. A series of written reports of the "in-person" visits of EMIE staff members to 24 of 49 institutes in the EMIE study--to 18 for educational media specialists and to 6 for school librarians. Some standardization of resulting appraisals was sought through use of an "On-site Visitors' Portfolio" developed by the EMIE central staff with the assistance of members of the EMIE Advisory Board and the four field visitors involved. Details of the visits are outlined in Chapter 4.

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FINAL REPORTS, PROPOSALS, AND PLANS OF OPERATION. Summer 1965 directors of the 49 institutes involved with the EMIE study were asked to furnish copies of their final reports, original proposals, and plans of operation. These items, now part of the collection of records in the EMIE office, are sources of a variety of exceptionally useful data. Although there was insufficient time to permit adequate analysis of them in preparing this PRELIMINARY REPORT, they will be consulted and used for a variety of purposes in presenting materials for the FINAL REPORT (January 1967).

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Evaluation of Content Institutes[1]

As previously mentioned, another and perhaps equally important phase of the EMIE Project for Summer 1965 relates to evaluations of the scope and quality of attention given to "new (instructional) materials" in institutes other than those for educational media specialists. Two activities were carried out during Summer 1965 in response to requests for such evaluations by representatives of the U.S. Office of Education. The first involved EMIE's recommendation of the temporary employment of an individual whose competence with respect to new instructional materials in the special field qualified him to evaluate this phase of the work of a small sample of institutes to be visited "in person." Four institutes in each field--history, geography, English, reading, modern foreign languages, and disadvantaged youth, 24 institutes in all--were visited. A portfolio of suggestions for conducting such visits assisted in standardizing assessments and reports. On-site visitors selected for this part of the study included Dr. Beryl Blain, Indiana University (history); Dr. Gilbert Tanner, Wisconsin State College, Eau Claire (geography); Dr. Martha Cox, San Jose State College (English); Dr. Dora Bashour, Hunter College (modern foreign languages); and Dr. Samuel Madden, Virginia State College, and Dr. Gene Whitehorn, California State College at Hayward (teachers of disadvantaged youth).

A second activity carried out during Summer 1965 to learn more about the scope and quality of attention to "new (instructional) materials" involved use of a brief questionnaire sent to directors of Summer 1965 institutes other than those for educational media specialists. Respondents were asked to estimate the amount of attention given in their institutes to various "new materials" activities (arranging exhibits of new materials, providing laboratory facilities and experiences, giving special demonstrations, arranging preview and auditioning sessions, and providing source lists or catalogs). They were also asked to indicate their interest or lack of interest in attending a special institute (during Spring 1966) in one of three locations in the United States for the purpose of improving and extending their acquaintance with new materials, equipment, and utilization techniques related to their special fields. Results of the use of this instrument and of the on-site visitors' reports are discussed in Chapter 6.

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[1] Evaluations or assessments of the total group of Summer 1965 institutes in each of these so-called "other" fields were carried out under the leadership of the following individuals: English--Dr. John Fisher, Executive Secretary, Modern Language Association, and Dr. Donald Gray, Department of English, Indiana University; Modern Foreign Languages--Dr. Donald Walsh, Modern Language Association; History--Dr. John Thompson, History Department, Indiana University; Geography--Dr. Saul Cohen, Executive Secretary, Association of American Geographers; Teachers of Disadvantaged Youth--Dr. Gordon Klopf, Bank Street School of Education (New York City); and Reading--Dr. Ralph Staiger, Executive Secretary, International Reading Association (Newark, Delaware).

Chapter 2

CHARACTERISTICS OF INSTITUTES

Study of the characteristics of Summer 1965 institutes for educational media specialists and school library personnel was directed toward the following aspects: (1) types of institutes, (2) institute dates, (3) geographic distribution of institutes, (4) geographic distribution of participants, (5) enrollment, (6) staff analyses, (7) budget analyses, (8) analysis of objectives, (9) analysis of institute courses, and (10) exceptional activities.

A EDUCATIONAL MEDIA SPECIALIST INSTITUTES

Types of Institutes

Summer 1965 educational media specialist institutes were formally classified in three ways. First, an institute could specify that its participants were to serve a particular range of grade levels.[1] Second, an institute could specify the

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[1] However, practically all educational media institutes (32 of the 36) accepted applicants serving from kindergarten through the twelfth grade (K-12). The other four institutes accepted applicants serving K-14, 1-14, 9-12, K-8, respectively.

TABLE 2-1

CLASSIFICATION OF INSTITUTES

Level of Preparation Required	Level of Organization			Specialized Aspects
	Single Building	Single/Multiple Bldg	Multiple Building	
Code 1		Indiana University	University of Southern California	
Code 2	Virginia State College		University of Colorado Boston University Syracuse University University of Texas	Arizona State University University of Illinois Columbia University Pennsylvania State University
Code 3	San Jose State College University of Connecticut University of Georgia Eastern Illinois University Purdue University Michigan State University University of Nebraska Kent State University Ohio State University University of Oklahoma Oregon State University	State University of New York at Oswego East Carolina College	University of Hawaii University of Minnesota University of New Hampshire University of North Carolina University of North Dakota Miami University University of Wisconsin	Northwestern University Kansas State College at Pittsburg Fordham University George Peabody College College of the Virgin Islands

degree of preparation and/or experience to be required of applicants (Code 1, 2, or 3). Third, programs of some institutes were designed to provide advanced study for participants serving specific organizational levels: (1) a single building, (2) a multiple building, or (3) a single and/or multiple building organization. Programs of one group of institutes were also designed to provide advanced study in some special aspect of educational media (television, programmed instruction, entertainment and documentary films, and the like).

Of the 36 educational media institutes in all, two were Code 1 types--one for the single building and the other for single and/or multiple building participants. There were nine Code 2 institutes--one for single building, four for multiple building, and four for some special aspect of media study. There were 25 Code 3 institutes--11 for single building, two for single and/or multiple building service, seven for multiple buildings, and five for some special aspect of media study (see Table 2-1).

Institute Dates

Lengths of the 36 educational media specialist institutes are portrayed graphically in Figure 2-1. It will be seen that their periods ranged from three to eight weeks. The median length was seven weeks, but the most frequent length was eight weeks.

Starting and ending dates of the 36 educational media specialist institutes are shown in

FIGURE 2-1. LENGTHS OF INSTITUTES

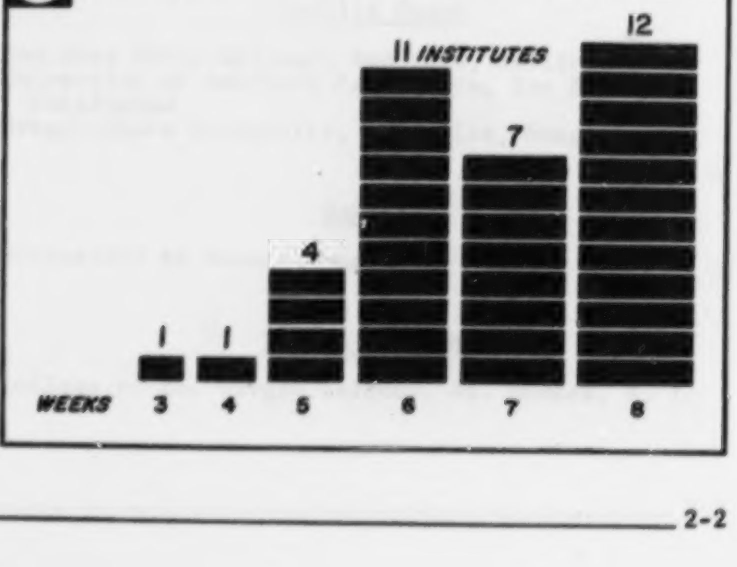


FIGURE 2-2. DATES AND LENGTHS OF INSTITUTES

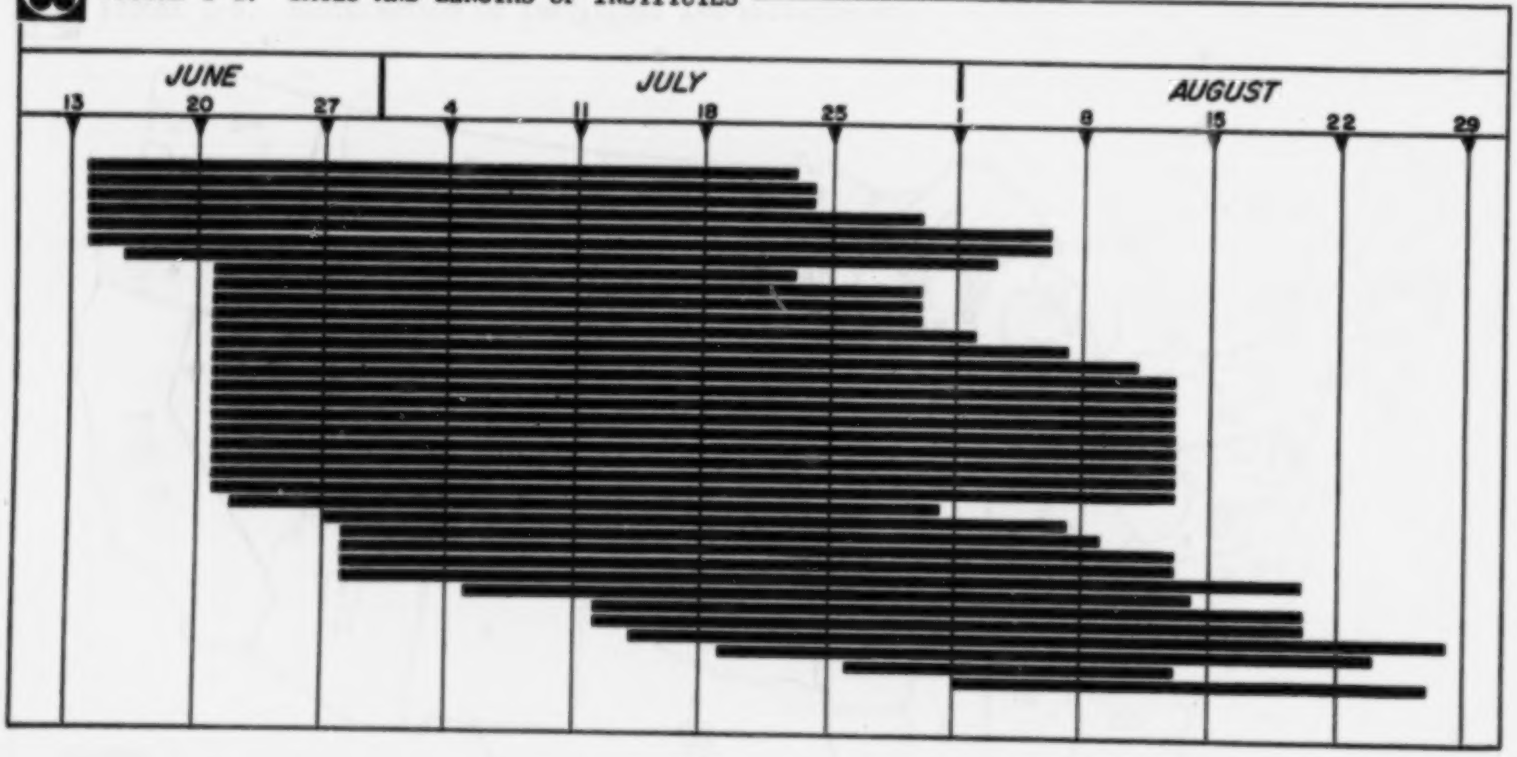


Figure 2-2. Their starting dates ranged from as early as June 14 to as late as August 1, 1965. Ending dates, on the other hand, ranged from July 22 to August 28, 1965. The most frequent starting and ending dates were, respectively, June 21 and August 13--a period coinciding with typical six- or eight-week summer sessions.

Geographic Distribution of Institutes

Locations of the 36 educational media specialist institutes were spread from Hawaii across the continent to the Virgin Islands (Figure 2-3). Of these, eleven were in the Midwest, eight in the East, seven in the Rocky Mountains and Plains Region, five in the South, three on the Pacific Coast, one in Hawaii, and one in the Virgin Islands. The following institutions conducted educational media specialist institutes during Summer 1965:

East

University of Connecticut, Storrs, Connecticut
Boston University, Boston, Massachusetts
University of New Hampshire, Durham, New Hampshire
Columbia University for Teachers, New York City, New York
Fordham University, New York City, New York
State University of New York at Oswego, Oswego, New York
Syracuse University, Syracuse, New York
Pennsylvania State University, University Park, Pennsylvania

South

University of Georgia, Athens, Georgia
East Carolina College, Greenville, North Carolina
University of North Carolina, Chapel Hill, North Carolina
George Peabody College for Teachers, Nashville, Tennessee
Virginia State College, Petersburg, Virginia

Midwest

Eastern Illinois University, Charleston, Illinois
Northwestern University, Evanston, Illinois
University of Illinois, Urbana, Illinois
Indiana University, Bloomington, Indiana
Purdue University, Lafayette, Indiana
Michigan State University, East Lansing, Michigan
University of Minnesota, Minneapolis, Minnesota
Kent State University, Kent, Ohio
Miami University, Oxford, Ohio
Ohio State University, Columbus, Ohio
University of Wisconsin, Madison, Wisconsin

Rocky Mountains and Plains

Arizona State University, Tempe, Arizona
University of Colorado, Boulder, Colorado
Kansas State College at Pittsburg, Pittsburg, Kansas
University of Nebraska, Lincoln, Nebraska
University of North Dakota, Grand Forks, North Dakota
University of Oklahoma, Norman, Oklahoma
University of Texas, Austin, Texas

Pacific Coast

San Jose State College, San Jose, California
University of Southern California, Los Angeles, California
Oregon State University, Corvallis, Oregon

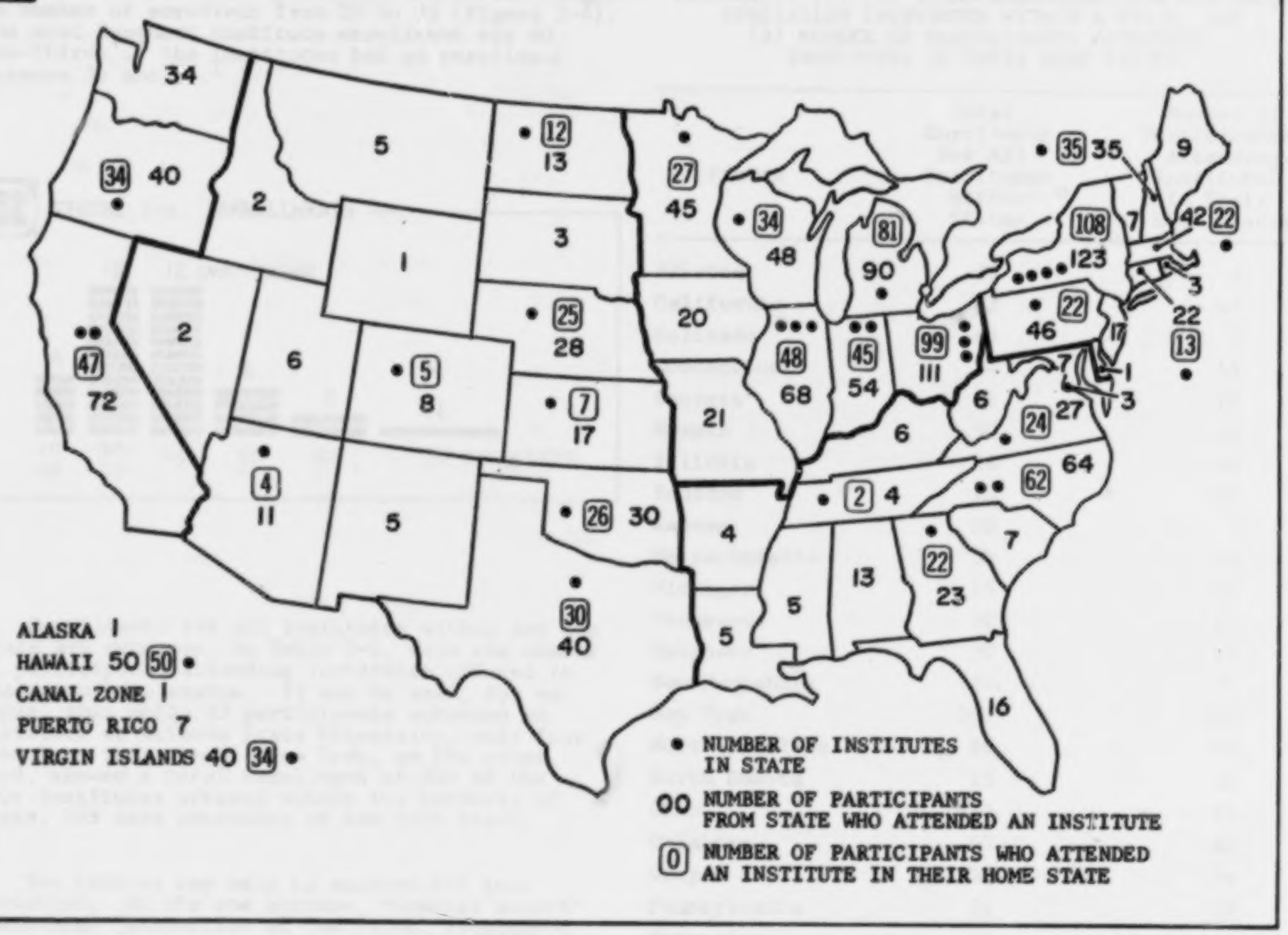
Hawaii

University of Hawaii, Honolulu, Hawaii

Virgin Islands

College of the Virgin Islands, St. Thomas, V. I.

FIGURE 2-3. DISTRIBUTION OF INSTITUTES AND PARTICIPANTS


ALASKA 1
HAWAII 50 50 ●
CANAL ZONE 1
PUERTO RICO 7
VIRGIN ISLANDS 40 34 ●
● NUMBER OF INSTITUTES IN STATE
00 NUMBER OF PARTICIPANTS FROM STATE WHO ATTENDED AN INSTITUTE
0 NUMBER OF PARTICIPANTS WHO ATTENDED AN INSTITUTE IN THEIR HOME STATE

Geographic Distribution of Participants

The number of educational media specialist institute participants who attended institutes in their home states are shown enclosed in squares in Figure 2-3. The number of individuals from each state who enrolled in an institute anywhere in the United States are shown in Figure 2-3 as unenclosed arabic numerals.

Code 1 institutes (2 institutes, 60 participants) enrolled only a small minority (30%) of out-of-state residents. Code 3 institutes (25 institutes, 982 participants) enrolled an even smaller percentage (28%) of out-of-state residents. But almost half (48%) of Code 2 institute (9 institutes, 332 participants) enrollees were out-of-state residents.

Differences among Codes 1, 2, and 3 institutes in out-of-state attendance become more meaningful when various types of institutes are examined. First, there were four Code 2 and five Code 3 "special aspect" institutes (TV, 8mm film, and the like) which enrolled a geographically diverse sample of participants. Only 43% of Code 2 and 45% of Code 3 participants in these "special aspect" institutes lived in the state in which the institute was located. Second, there was a definite trend (77%) for Code 3 institutes, other than "special aspect" types, to enroll only residents of their own state. This was especially true for Code 3 multiple building institutes, in which 81% of enrollees were in-state residents. Hence, there were 20 out of 25 Code 3 institutes which enrolled only 23% of out-of-state residents. Third, Code 2 institutes, other than "special aspect" types, accepted a more geographically diverse sample of participants than did either Code 1 or Code 3 institutes. Only 58% of these institute enrollees attended an institute in their home state.

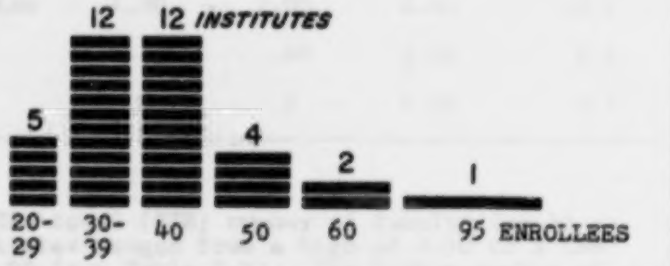
With the exception of all Code 2 and "special aspect" Code 3 institutes, Summer 1965 educational media specialist institutes generally chose to accept a much larger number of in-state, rather than out-of-state, residents. Unfortunately, there is little available information to judge whether or not Summer 1965 institutes met the demands of out-of-state specialists for institutes of this kind. However, the ratio of the number of applicants to number of enrollees (in some cases this was higher than 6 to 1) and the ratio of inquiries to enrollees (as high as 20 to 1) suggest that many out-of-state applicants would have enrolled in educational media specialist institutes had they been allowed the opportunity.

While residents from every state were enrolled in at least one of the 36 educational media specialist institutes, there were several states in which an institute was not held which contributed a fairly large number of participants. Among these were Washington (34), Missouri (21), Iowa (20), New Jersey (17), Florida (16), and Alabama (13).

Enrollment

Educational media specialist institutes ranged in number of enrollees from 20 to 95 (Figure 2-4). The most frequent institute enrollment was 40. Two-thirds of the institutes had an enrollment between 30 and 49.[1]

FIGURE 2-4. ENROLLMENTS



Enrollments for all institutes within any one state are compared, in Table 2-2, with the number of participants attending institutes offered in their own home states. It may be seen, for example, that while 33 participants attended an institute at Arizona State University, only four came from that state. New York, on the other hand, showed a total enrollment of 200 at the four institutes offered within its borders; of these, 108 were residents of New York State.

Two factors may help to account for this variation. At the one extreme, "special aspect" institutes (production of 8mm films, programmed instruction, entertainment films as teaching resources in English, and others) uniformly enrolled a geographically diverse group of students. Hence, some states with only these types of institutes (Tennessee, for example) enrolled few resident participants. At the other extreme, institutes offered in certain states chose their own residents in preference to those from out of state.

TABLE 2-2

COMPARISON OF: (1) TOTAL ENROLLMENT FOR ALL MEDIA SPECIALIST INSTITUTES WITHIN A STATE, AND (2) NUMBER OF PARTICIPANTS ATTENDING INSTITUTES IN THEIR HOME STATES

States	Total Enrollment for All Institutes Within States	Number of Participants Attending Institutes in Their Home States
Arizona	33	4
California	62	47
Colorado	40	5
Connecticut	24	13
Georgia	30	22
Hawaii	50	50
Illinois	84	48
Indiana	70	45
Kansas	20	7
Massachusetts	30	22
Michigan	95	81
Minnesota	30	27
Nebraska	30	25
New Hampshire	50	35
New York	200	108
North Carolina	80	62
North Dakota	25	12
Ohio	110	99
Oklahoma	40	26
Oregon	50	34
Pennsylvania	30	22
Tennessee	40	2
Texas	40	30
Virginia	35	24
Wisconsin	40	34
Virgin Islands	40	34

Staff Analyses

Information contained in Table 2-3, and in the accompanying text,[2] pertains to the instructional staff of the educational media specialist institutes. "Instructional staff" is defined here as staff members engaged as instructors, with their assigned time expressed in terms of "full-time equivalent (FTE)". Such staff members do not include administrative, technical, or graduate assistants; nor do they include consultants or "guest lecturers." However, teaching loads of directors and/or associate assistant directors are included in the totals. Thus, a director who devoted one-fourth of his time to teaching would be listed in the following charts as a .25 (FTE) faculty member.

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[1] Most directors' final reports emphasized that Summer 1965 enrollments were the maximum permissible at their institutions. Had enrollments been any larger, facilities would no doubt have been inadequate. There appeared to be no general agreement, however, as to the optimum number of participants for an institute.

[2] This information was obtained from two Code 1, nine Code 2, and 22 of 25 Code 3 institutes. Data are unavailable from one "special aspect" type and two single and/or multiple building type institutes.

TABLE 2-3

STAFF ANALYSES, 33 OF 36 EDUCATIONAL MEDIA INSTITUTES

Quartile	Full-Time Equivalent (FTE) Faculty			Faculty to Student Ratio (1:-)
	Local	Visiting	Total	
High	5.50	3.50	7.70	40.0
75	2.25	2.00	4.00	16.9
Median	1.50	1.00	2.83	12.0
25	.75	.60	2.00	8.8
Low	0	0	1.00	5.7

The total (FTE) number of faculty for 33 institutes ranged from a high of 7.70 to a low of 1.00 (see Table 2-3). The median number of faculty was 2.83. One-fourth of the institutes had less than 2.00 faculty members; an additional one-fourth had more than 4.00.

The median number of local faculty (FTE) for the 33 institutes on which information was available appeared as 1.50 (see Table 2-3). The number of local faculty ranged from a high of 5.50 in one institute to a low of 0. One-fourth of the institutes had less than .75 local faculty; an additional one-fourth had more than 2.25.

The number of FTE visiting faculty ranged from 3.50 to 0 (see Table 2-3). The median number of visiting faculty was 1.00. One-fourth of the institutes had more than 2.00 visiting faculty; another one-fourth had less than .60.

Of the 33 educational media specialist institutes on which information was available, the ratio of students to total number (FTE) of faculty ranged from 40.0 to 5.7 (see Table 2-3). The median student-to-faculty ratio was 12.0. One-fourth of all the institutes had a student-to-faculty ratio of more than 16.9; an additional one-fourth had a ratio of less than 8.8.

Budget Analyses

Information discussed below[1] was obtained from the Plans of Operation of two Code 1, nine Code 2, and 23 of 25 Code 3 educational media specialist institutes. Hence, these data represent 34 of the total of 36 such institutes.

TABLE 2-4

BUDGET ANALYSES FOR 34 OF 36 EDUCATIONAL MEDIA SPECIALIST INSTITUTES

Quartile	Amount[a] of Budget	Enrollee Cost per Week	Per Cent of Salary of Direct Costs
High	$47,000	$233	88%
75	35,000	147	76%
Median	27,000	115	68%
25	22,000	93	64%
Low	17,000	63	57%

[a] This is a total of direct plus indirect costs rounded off to the nearest $1,000. Participant stipends are not included.

For 34 out of 36 educational media specialist institutes, the median budget figure, rounded off to the nearest $1,000, was $27,000, exclusive of stipends (see Table 2-4). Budgets ranged in amount from a high of $47,000 to a low of $17,000. One-fourth of the institutes showed a budget of less than $22,000; an additional one-fourth had budgets of more than $35,000.

The median cost per enrollee per week (exclusive of stipends) for 34 institutes was $115 (see Table 2-4). Twenty-five per cent of these institutes had a cost per enrollee of less than $93 per week; another 25% had a figure of more than $147. Cost per enrollee per week ranged from $233 to $63.

To determine the extent to which direct costs were expended on salaries as compared to materials, travel expenses, equipment rentals, and the like, calculations were made of the percentages of salaries and direct costs (see Table 2-4). By this process, the median percentage of direct costs devoted to salaries for 34 institutes was shown to be 68%; the highest percentage was 88%; the lowest was 57%. One-fourth of the institutes showed less than 64% for such purposes; another one-fourth showed more than 76%.[2]

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[1] Data for two Code 3 (single and/or multiple building) institutes were not included; however, it is believed their exclusion had little effect on the resulting over-all statistics.

[2] There appears to be rather general consensus among educational media specialist institute directors that few changes are necessary in future institute budgets. The one change most frequently mentioned, however, called for an increase in funds allotted to equipment rentals. Many directors thought that the addition of some recent innovations in "new media" equipment would have broadened considerably the scope of participant experiences. To compensate for the many additional evening and weekend hours staff members spent with participants, increases in salaries were suggested by a few directors. Several directors also recommended that institutes should be allowed to procure library materials which were either in great demand or unavailable.

Analysis of Objectives (Code 3)

The most frequently cited objectives of the 11 Code 3 (single building) institutes are included in Table 2-5, according to: (1) the number of institutes for which each type of objective was listed, and (2) the total number of listings of each objective by all 11 institutes. For example, ten of the eleven institutes listed 14 objectives relating to the selection and evaluation of instructional materials. Ten institutes listed 13 objectives relating to the development of participant skill in producing simple instructional materials. Twenty-two objectives listed by nine institutes were concerned with the development, organization, or conduct of in-service education programs. Eight listed 17 objectives concerned with the development of a rationale relating all types of media to instructional and curriculum problems. Seven institutes cited 11 objectives concerned with uses of source lists and the location and procurement of educational media. Ten objectives listed by seven institutes were concerned with the use, costs, special advantages, characteristics, and operating techniques required for various technological devices for educational media. Seven institutes listed 9 objectives dealing with the maintenance of equipment. Six institutes listed a total of 16 objectives dealing with the administration and organization of educational media programs.

Production of more complex educational media (TV, 8mm film, and others) was the subject of 10 objectives listed for six institutes. Six institutes listed nine objectives concerning the relationship of educational media and theoretical aspects of learning. Four institutes listed eight objectives concerning the planning of facilities to permit adequate use of educational media. Four institutes enumerated seven objectives dealing with the evaluation and selection of technological devices. Finally, four institutes cited objectives concerning the ability of participants to prepare, defend, and expend budgets for educational media programs.

In addition to the objectives enumerated above and in Table 2-5, there were some twelve objectives that were not classified. The following are examples of these types: (1) "to stimulate thinking regarding a balanced educational media program," (2) "to become acquainted with the concept of the instructional materials center," and (3) "to recommend procurement of professional books and periodicals dealing with educational media and techniques for the school's professional library."

Objectives of Code 3 (single building) educational media institutes varied both as to content and quality. Some were quite specific ("to develop the ability to produce simple and inexpensive teaching materials"--followed by a listing of the types involved). On the other hand, some were rather broad ("to recognize and propose practical means for overcoming deterrents to and effective uses of various educational media"). One institute's objectives were so vague that course content had to be used as the basis for their classification.[1]

TABLE 2-5

ANALYSIS OF OBJECTIVES FOR ELEVEN CODE 3 SINGLE BUILDING MEDIA SPECIALIST INSTITUTES

Objectives	Number of Institutes Citing Each Objective	Total Number of Objectives
To improve knowledge of or skills in:		
Evaluation and selection of educational media	10	14
Production of simple instructional materials	10	13
Organization and administration of in-service education programs	9	22
Coordination of media with curriculum	8	17
Location and procurement of educational media	7	11
Characteristics, uses, operation, and costs of technological devices	7	10
Maintenance of equipment	7	9
Administration and organization of educational media programs	6	16
Production of more complex (TV, 8mm film, other) educational media	6	10
Theory and research--roles of new media in educational communication	6	9
Planning educational facilities	4	8
Evaluation and selection of technological devices	4	7
Preparation, defense, and expending of budgets	4	4

Objectives for other institutes were stated, at the outset, only as course content ("voice amplification systems for teachers operating in large-group situations"). Those for two other institutes were stated primarily as duties or activities participants would be expected to perform "on the job" ("to learn to assume responsibility for correspondence relating to a building audio-visual coordinator's assignments").

However, the majority of the 11 institutes stated their objectives, as outlined in Bloom's Taxonomy of Educational Objectives, in terms of anticipated behavioral changes in participants. Objectives of these types appeared to be more meaningful than those cast in other forms, especially when they were specific, mutually exclusive, and relatively concrete.

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[1] For example, "to provide opportunities for teachers with minimal training and experience in the media field to up-date themselves and to do some study in depth as further preparation for full-time or part-time work as school building educational media specialists."

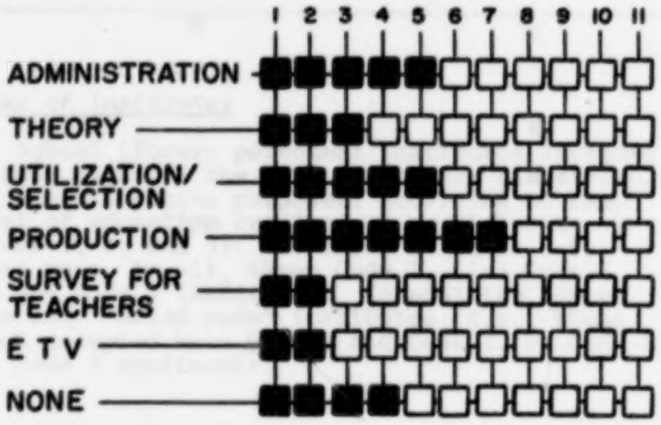
Analysis of Institute Courses (Code 3)

Institutes of the Code 3 (single building) type were singled out for an analysis of course offerings for the following reasons: (1) this type of institute was expected to enroll participants having the least experience and/or education, and, hence, the most need for a comprehensive survey of "educational media," and (2) of 36 educational media specialist institutes, 11 were of this (most frequent) type.

Seven of the 11 Code 3 (single building) institutes were found to have offered formal, separate graduate courses in various areas of "educational media" (see Figure 2-5). Four of the 11 did not offer separate courses, but in those the participants could earn graduate credit in courses with such titles as "Workshop Seminar."

FIGURE 2-5. FORMAL COURSE OFFERINGS

Number of 11 single building Code 3 institutes offering courses in these content fields:



Five of the institutes offered courses in the administration of audio-visual services (e.g., "Audio-Visual Administration" or "Administration of Audio-Visual Services"). Seven of the institutes offered a course in the preparation or production of educational media. Such preparation courses generally dealt with the production of simple materials (slides, flat picture mounting, photographs) and bore titles such as "Materials Design and Production" or "Preparation of Audio-Visual Aids." Only three institutes offered courses dealing with theoretical aspects of the field. The courses dealt with learning theory and its relation to curriculum and/or to self-study materials. Five institutes offered courses in the broad areas of utilization-selection-evaluation. While three institutes offered courses titled "utilization" and two titled "selection," each course integrated utilization, selection and evaluation factors. Two institutes offered a basic survey course (e.g., "Introduction to Audio-Visual Education") oriented toward "teaching with" educational media. Finally, two institutes offered a course in educational television, emphasizing utilization rather than production of television programs.

Exceptional Activities

A number of institutes were fortunate in having special related projects or conferences held at their institutions. The following three institutions are examples: (1) University of Colorado with an Educational Technology Dissemination Project; (2) Fordham University with its Third Annual Conference on Film Study; and (3) University of Indiana with its Annual Educational Media Summer Conference. In addition, participants of a majority of institutes in the Midwest were able to visit the National Audio-Visual Association trade fair held in Chicago.

Space considerations prevent a complete listing of unique instructional features of educational media specialist institutes. The following examples, however, will serve as illustrations: (1) Boston University had a direct-line computer link for actual use and for demonstration; it also had access to an operating, public school television studio; (2) the University of Southern California used a number of three-screen presentations; (3) the University of North Dakota used tele-lectures and found them to be especially effective when combined with visuals; (4) a four-day class in drawing was conducted by the University of Oklahoma; and (5) participants at the University of Illinois produced programmed lessons, tried them out experimentally with subjects for item analysis and revision, then cross-validated the items.

Obviously, "special aspect" educational media specialist institutes' entire programs were unique. The following programs were typical: (1) Columbia University, Self-Instructional Multi-Level Materials and Automated Instruction; (2) Northwestern University, Closed Circuit TV Production; and (3) Arizona State University with its production of 8mm films.

The majority of institutes produced kits, handbooks, special projects, and/or materials to be used on the job or for in-service training programs. These productions were generally tailored to meet specific needs of participants.

B LIBRARIANSHIP INSTITUTES

As previously mentioned, thirteen of the 26 institutes for school library personnel offered during Summer 1965 were designated for analysis as part of the EMIE Project. Those selected emphasized in their programs some aspect of "new media" or the "instructional materials center" concept.

The study of these institutes, as presented in materials following, relates to: (1) types of institutes, (2) institute dates, (3) geographic distribution of institutes, (4) geographic distribution of participants, (5) enrollment, (6) staff analyses, (7) budget analyses, (8) analysis of objectives, and (9) analysis of institute courses.

Comparisons of findings for school library personnel and educational media specialist institutes will be deferred to the final chapter.

TABLE 2-6

SCHOOL LIBRARIANSHIP INSTITUTES STUDIED, BY CODE TYPES, SUMMER 1965

Code 1	Code 2	Code 3	Mixed Codes (1,2; 2,3)
University of Minnesota "Development and Use of Multi-Media Library Collections"	East Tennessee State University "The Instructional Materials Center"	Boston University "The Instructional Materials Center"	North Texas State University "Educational Media for School Librarians"
University of Washington "The School Library Supervisor in the Modern Educational Program"	Indiana University "The Library in the Modern School"		State University of New York at Albany "Developing and Supervising Instructional Materials Centers"
Western Michigan University "Development and Supervision of Instructional Materials"	Our Lady of the Lake College "School Library Service for Bilingual Children, English and Spanish"		University of Oregon "School Libraries and Contemporary Educational Concepts"
	Queens College "Elementary School Library Service for Disadvantaged Children"		University of Wisconsin "Changing Education and the Changing School Library"
	Texas Woman's University "Selection and Use of School Library Collections"		

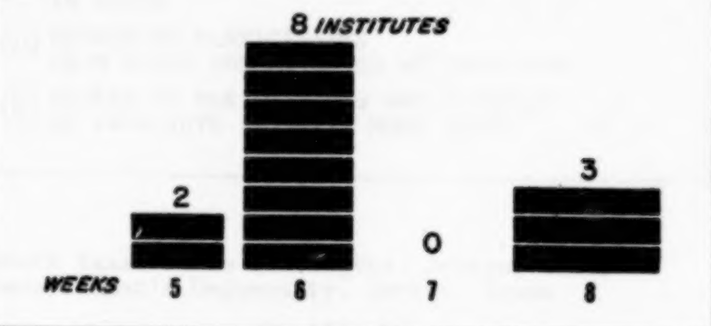
Types of Institutes

School library personnel institutes included in this phase of the EMIE study were classified, for administrative purposes, according to the level of education required of participants (Codes 1, 2, and 3). As shown in Table 2-6, there were, in all, three Code 1, five Code 2, and one Code 3 institutes. In addition, there were four "mixed code" institutes, i.e., those which accepted both Code 1 and Code 2, or Code 2 and Code 3 applicants.

Institute Dates

Starting dates of school library personnel institutes ranged from June 3 to July 19; the median starting date was June 28 (Figure 2-6). Ending dates ranged from July 14 to August 27; the median ending date was August 13.

FIGURE 2-7. LENGTHS OF INSTITUTES



The median, and most frequent, institute length was 6 weeks (Figure 2-7). Institutes ranged in length from 5 to 8 weeks.

FIGURE 2-6. DATES AND LENGTHS OF INSTITUTES

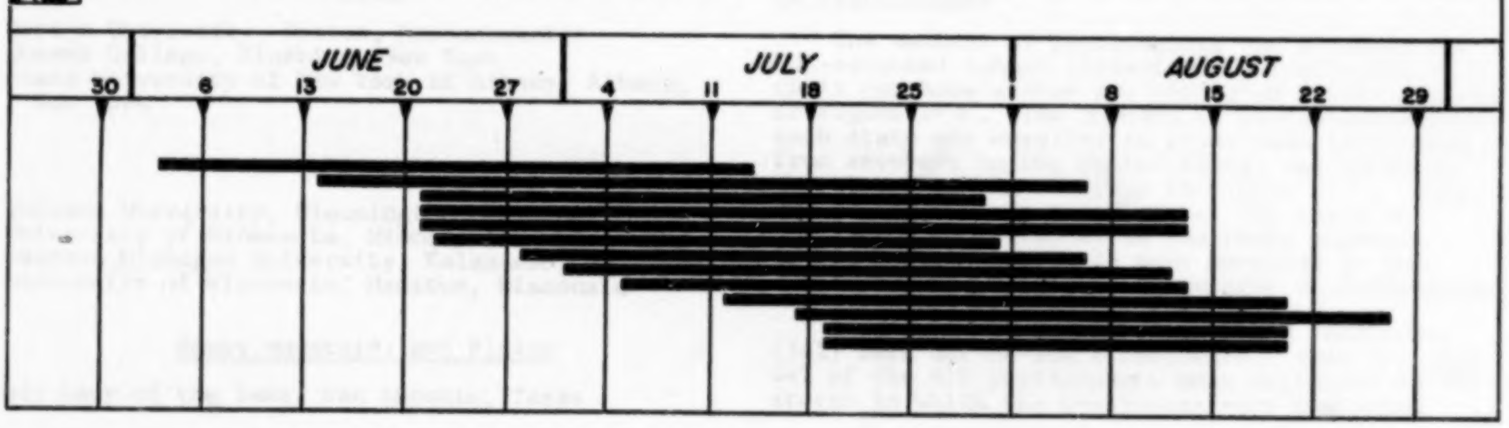
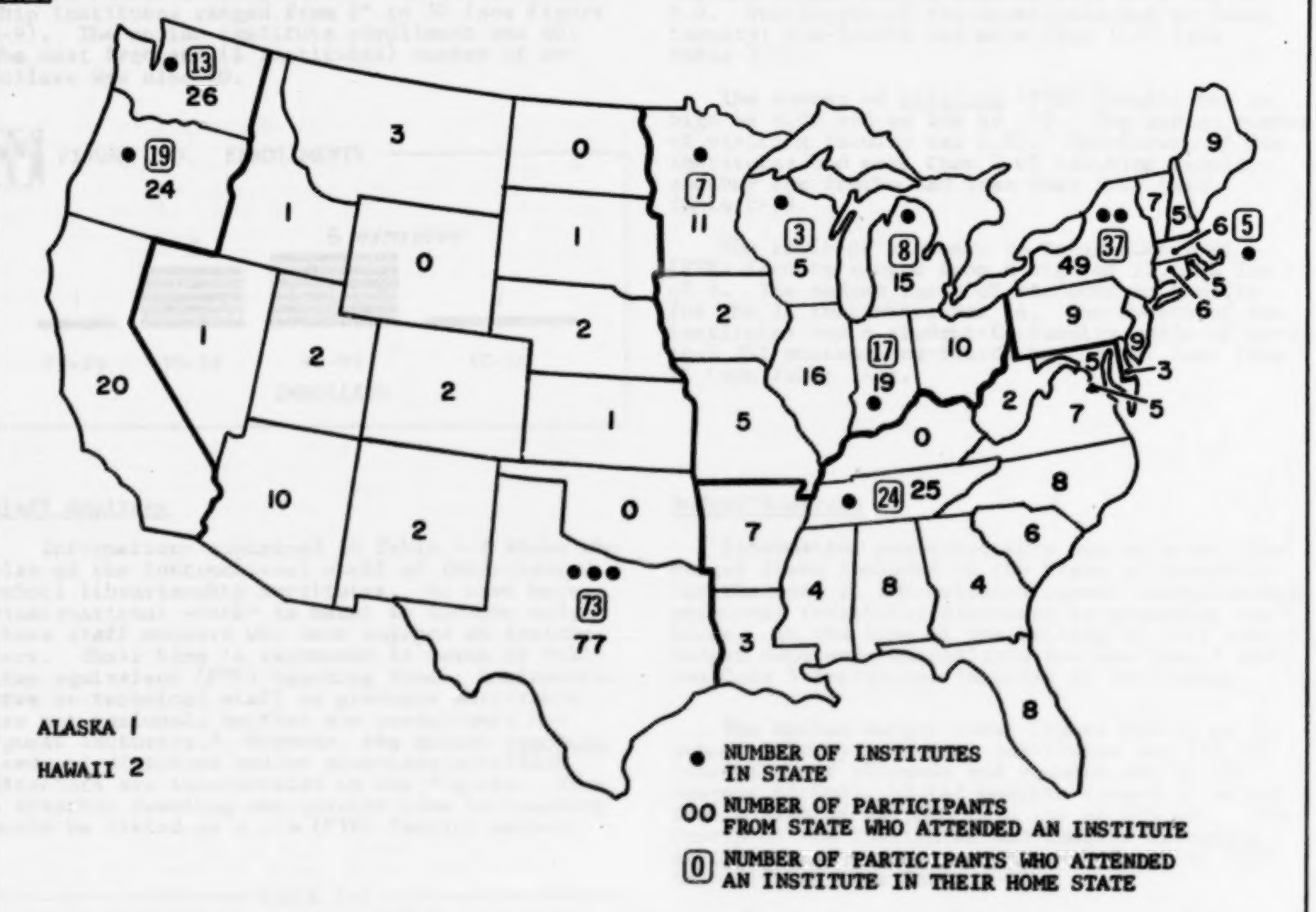


FIGURE 2-8. DISTRIBUTION OF INSTITUTES AND PARTICIPANTS


13
26
19
24
3
0
1
0
1
7
11
3
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8
15
9
7
5
6
5
5
6
37
49
9
9
5
3
5
2
7
10
17
19
16
2
5
2
1
1
20
2
2
10
2
0
73
77
0
24
25
8
6
7
4
8
4
3
8
ALASKA 1
HAWAII 2
● NUMBER OF INSTITUTES IN STATE
00 NUMBER OF PARTICIPANTS FROM STATE WHO ATTENDED AN INSTITUTE
0 NUMBER OF PARTICIPANTS WHO ATTENDED AN INSTITUTE IN THEIR HOME STATE

Geographic Distribution of Institutes

The 13 school library personnel institutes included in this study were held in ten different states (see Figure 2-8). Four of these 13 institutes were organized in the Midwest, three in the East, one in the South, two on the Pacific Coast, and three in the Rocky Mountains and Plains Region.

The institutions conducting these institutes were as follows:

East

Boston University, Boston, Massachusetts
Queens College, Flushing, New York
State University of New York at Albany, Albany, New York

Midwest

Indiana University, Bloomington, Indiana
University of Minnesota, Minneapolis, Minnesota
Western Michigan University, Kalamazoo, Michigan
University of Wisconsin, Madison, Wisconsin

Rocky Mountains and Plains

Our Lady of the Lake, San Antonio, Texas
North Texas State University, Denton, Texas
Texas Woman's University, Denton, Texas

Pacific Coast

University of Oregon, Eugene, Oregon
University of Washington, Seattle, Washington

South

East Tennessee State University, Johnson City, Tennessee

Geographic Distribution of Participants

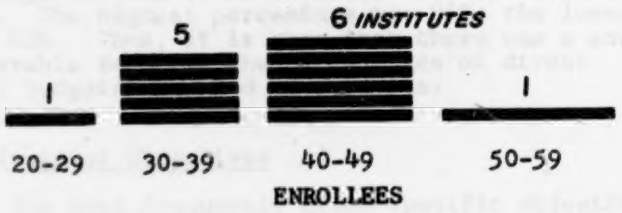
The numbers of participants who attended the IMC-oriented school librarianship institutes in their own home states are indicated within squares in Figure 2-8. The numbers of participants from each state who enrolled in these same institutes from anywhere in the United States are shown as unenclosed arabic numerals in Figure 2-8. Thus, of the total of 26 residents of the state of Washington who attended an institute anywhere in the United States, 13 were enrolled in the institute offered at the University of Washington.

A majority of enrollees in these institutes (56%) were out-of-state residents. That is, only 44% of the 470 participants were residents of the states in which the institutes were conducted.

Enrollment

The number of enrollees in the 13 librarianship institutes ranged from 25 to 50 (see Figure 2-9). The median institute enrollment was 40; the most frequent (6 institutes) number of enrollees was also 40.

FIGURE 2-9. ENROLLMENTS



Staff Analyses

Information[1] contained in Table 2-7 shows the size of the instructional staff of IMC-oriented school librarianship institutes. As used here, "instructional staff" is meant to include only those staff members who were engaged as instructors. Their time is expressed in terms of full-time equivalent (FTE) teaching time. Administrative or technical staff or graduate assistants are not included; neither are consultants nor "guest lecturers." However, the actual teaching loads of directors and/or associate-assistant directors are incorporated in the figures. Thus, a director devoting one-quarter time to teaching would be listed as a .25 (FTE) faculty member.

TABLE 2-7

STAFF ANALYSES, 11 OF 13 SCHOOL LIBRARIANSHIP PERSONNEL INSTITUTES

Quartile	Full-Time Equivalent (FTE) Faculty Local	Visiting	Total	Faculty to Student Ratio (1:-)
High	2.00	4.00	4.25	23
75	1.25	2.05	3.25	20
Median	1.00	2.00	2.20	14
25	0	1.00	1.90	11
Low	0	.75	1.70	8

The total number of faculty (FTE) for the 11 institutes ranged from a high of 4.25 to a low of 1.70. The median number was 2.20. One-fourth of the institutes had less than 1.90 faculty; an additional one-fourth had more than 3.25 (see Table 2-7).

The median number of local (FTE) faculty for the 11 institutes was 1.00. The number of local faculty ranged from a high of 2.00 to a low of 0.0. One-fourth of the institutes had no local faculty; one-fourth had more than 1.25 (see Table 2-7).

The number of visiting (FTE) faculty was as high as 4.00 and as low as .75. The median number of visiting faculty was 2.00. One-fourth of the institutes had more than 2.05 visiting faculty; another one-fourth had less than 1.00 (see Table 2-7).

The ratio of students to total number of (FTE) faculty ranged from a high of 23 to a low of 8. The median ratio of students to faculty for the 11 institutes was 14. One-fourth of the institutes had a student-to-faculty ratio of more than 20; another one-fourth had one of less than 11 (see Table 2-7).

Budget Analyses

Information presented here was obtained from budget items included in the Plans of Operation for the same 11 IMC-oriented school librarianship personnel institutes discussed in preceding sections. At the time of the writing of this report, budget data were unavailable for one Code 2 and one Code 3 institute included in this group.

The median budget total figure for 11 of 13 school library personnel institutes was $19,000 (exclusive of stipends and rounded off to the nearest $1,000). Total budgets ranged in amount from a high of $32,000 to a low of $15,000. One-fourth of the institutes had budgets exceeding $27,000; another one-fourth had budgets of less than $17,000 (see Table 2-8).

TABLE 2-8

BUDGET ANALYSES FOR 11 OF 13 SCHOOL LIBRARIANSHIP PERSONNEL INSTITUTES

Quartile	Amount[a] of Budget	Enrollee Cost per Week	Per Cent of Salary of Direct Costs
High	$32,000	$178	86%
75	27,000	120	80%
Median	19,000	99	77%
25	17,000	72	73%
Low	15,000	61	65%

[a] This is a total of direct plus indirect costs rounded off to the nearest $1,000. Participant stipends are not included.

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[1] This information was obtained from 11 of 13 school library personnel institutes. Data were available for one Code 2 and one Code 3 institute at the time this report was prepared.

The median cost-per-enrollee-per-week (exclusive of stipends) was $99. Cost per enrollee per week ranged from a high of $178 to a low of $61. One-fourth of the institutes had a cost per enrollee per week of less than $72; another one-fourth had a figure of more than $120 (see Table 2-8).

Various percentages of direct cost budgets of librarianship institutes were also calculated to determine proportions spent on salaries (see Table 2-8). Results showed that the median percentage for the 11 of 13 institutes involved was 77%. The highest percentage was 86%; the lowest was 65%. Thus, it is seen that there was a considerable range in the percentages of direct cost budgets expended on salaries.

Analysis of Objectives

The most frequently cited specific objectives for 10 of the 13 school library personnel institutes are presented in Table 2-9 according to the actual number of institutes listing each (many institutes listed two or more similar objectives). Eight institutes listed 19 objectives concerning recent curriculum and educational developments. Ten of these dealt specifically with curriculum trends; the other nine dealt with either general aspects (e.g., "to examine current trends in education, such as team teaching, grouping patterns, non-graded schools, . . .") or with teaching (e.g., "to develop a clear understanding of the teaching techniques which make use of newer educational media").

Seven institutes listed nine objectives concerned with the selection and evaluation of instructional materials. Ten objectives listed by six institutes were concerned with the administration and organization of school library programs. Five institutes listed objectives dealing with ways of using educational media. Four institutes cited six objectives concerned with the planning of school library facilities. Three each listed at least one objective concerned with improving participants' skills in operating various types of new media equipment. Two institutes listed a total of four objectives dealing with ways of conducting and organizing in-service education programs.

In addition to objectives mentioned above the ten institutes together listed nine miscellaneous objectives of a general or highly individual nature. Some of these dealt with special aspects of an institute's program ("to examine in depth by instruction, field work, and supplementary lecturers the environments in which disadvantaged children live"). Others were quite general ("to gain background for building library collections of instructional materials").

TABLE 2-9

ANALYSIS OF OBJECTIVES FOR 10 OF 13 SCHOOL LIBRARIANSHIP PERSONNEL INSTITUTES

Objectives	Number of Institutes Citing Each Objective	Total Number of Objectives
Recent curriculum and educational developments	8	19
Evaluation and selection of instructional materials	7	9
Administration and organization of school library programs	6	10
Utilization of educational media	5	5
Planning school library facilities	4	6
Equipment operation	3	3
Conducting in-service education programs	2	4

Analysis of Institute Courses

Seven of the eleven school library personnel institutes for which information was available at the time of the preparation of this report offered formal, separate graduate courses for various aspects of "educational media" and "librarianship." The remaining four did not, but their participants could earn graduate credit in general seminar courses.

Four institutes offered six courses in the administration of library programs (e.g., "Problems in Administration and Supervision of School Libraries," or "Human Elements in Administration"). Two offered courses in evaluating and selecting audio-visual materials. Two offered courses in organizing and processing library materials. Two institutes offered a course in "curriculum and instructional materials"; one offered a course in the evaluation and selection of printed materials. An "instructional materials center laboratory course" was offered, for credit, by only one institute.

Chapter 3

CHARACTERISTICS OF STUDENTS

Information reported in this section was derived from participant responses to the PERSONAL INFORMATION REPORT FORM: SECTION I, BACKGROUND INVENTORY, produced by the EMIE Project. Development of this inventory first began with selection of a pool of paper-and-pencil items obtained from the following sources: (1) texts in the educational media field, (2) relevant measurement instruments, and (3) other similar lists suggested by local educational media specialists.

To evaluate this original item pool for significance, semantic clarity, and readability, items were first administered to two groups of 38 students each enrolled in a basic audio-visual course at California State College (Hayward). Items were then revised, as necessary, and sent for criticism and editing to members of the EMIE Advisory Board, to three staff members of the U.S. Office of Education, and to all 36 directors of educational media specialist institutes for Summer 1965 in whose institutes it was proposed to use the inventory. Five board members, two USOE staff members, and 20 of the 36 institute directors returned the forms, marked with their suggestions. These were incorporated, insofar as possible, in the final version which was then developed in a format suitable for machine processing.

A few preliminary observations concerning the manner in which the statistics of this chapter are reported may be of assistance to the reader:

- Descriptive statistics appearing in Section A were based upon responses of 1,363 participants in 36 educational media specialist institutes. Of these, 60 were Code 1, 325 were Code 2, and 978 were Code 3 (level of preparation) participants.[1]

- Statistics appearing in Section B of this chapter are based upon responses of 470 participants in 13 school library personnel institutes. Of these, 95 were Code 1, 195 were Code 2, and 30 were Code 3 participants.[1] The remaining 150 participants were in institutes with "mixed codes" (that is, in institutes enrolling both Code 1 and Code 2, or both Code 2 and Code 3 participants).

- Except for those results dealing with numerical responses (semester hours, age, and the like), all figures appearing in this chapter relate to percentages. Since both educational media institute code groups and librarianship code groups are of disproportionate sizes, the reader should bear in mind the fact that percentages may sometimes be misleading if not translated in terms of original numbers.

- Unless there are significant differences between code groups, they will not be discussed separately. The results will often refer only to the responses of all participants--educational media or library alike. Neither will responses of participants in "mixed code" librarianship institutes be discussed separately, since there is no way of distinguishing, within such institutes, between a Code 1, Code 2, or Code 3 individual.

A EDUCATIONAL MEDIA SPECIALIST INSTITUTES

Resulting data for the 36 educational media specialist institutes are presented and discussed in this section under the following headings: (1) Sex and Age, (2) Degrees Held, (3) Graduate Work Completed, (4) School Credentials, (5) Future Plans for Graduate Study, (6) Previously Completed "New Media" Courses, (7) Present Employment (Level), (8) Present Positions, (9) Future Employment Plans, (10) Membership in Educational Media Groups, (11) Membership in Other Professional Groups, (12) Employees Supervised, and (13) Time Spent in "Educational Media" Activities.

Sex and Age

Educational media institute participants may be typified as male (78%), married (82%), and about 38 years old. When questioned as to the number of dependents for whom they were claiming NDEA support, roughly 15% responded to each of the following: none, one, two, three, four, five or more.

TABLE 3-1

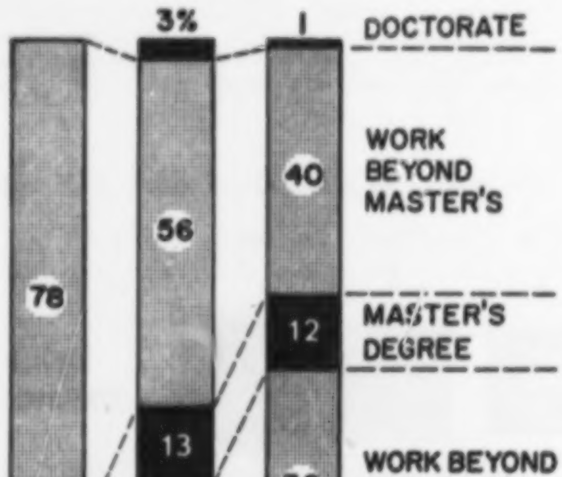
DEGREES HELD (MEDIA SPECIALISTS)

	Code 1	Code 2	Code 3
Bachelor's degree, but no graduate work	0	5	10
Bachelor's degree, plus some graduate work	10	22	36
Master's degree, but no work beyond it	10	13	12
Master's degree, plus some additional work	78	56	40
Doctorate, but no post-doctorate work	0	2	1-
Doctorate, plus some post-doctorate work	0	1	0

Degrees Held

Approximately 58% of participants in media specialist institutes had at least a master's degree (see Table 3-1 and Figure 3-1). Almost 80% of Code 1, 56% of Code 2, and 40% of Code 3 participants had completed graduate work beyond the master's degree. Only 10% of Code 3, 5% of Code 2, and none of the Code 1 participants had only a bachelor's degree. Less than 1% of all participants had received the doctorate.

FIGURE 3-1. DEGREES HELD



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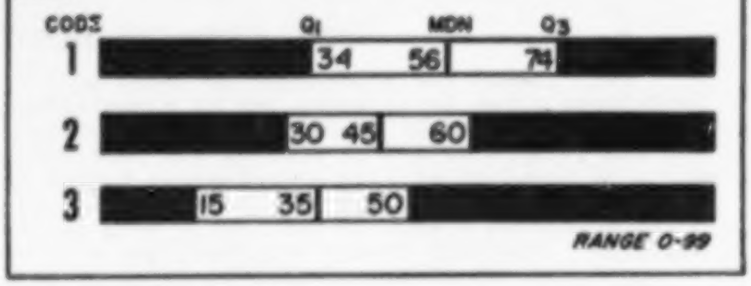
[1] See Chapter 1 for further information concerning these code designations.

Graduate Work Completed

All Summer 1965 participants had completed a substantial amount of graduate work (see Figure 3-2). The median number of semester units of graduate work completed, prior to the institute, was 56 for Code 1, 45 for Code 2, and 35 for Code 3 participants. Of Code 1, Code 2, and Code 3 participants, 75% had completed, respectively, at least 34, 30, and 15 semester units of graduate work.

FIGURE 3-2. GRADUATE UNITS COMPLETED



School Credentials

Participants were asked which school service credentials and/or certificates they held and which they expected to hold within the next five years. Almost all participants responded as presently holding an elementary and/or secondary credential or certificate. About one-fourth held a principal's credential, while 13% held one for supervision. For those holding a second credential or certificate, the credential for principal appeared to have first rank, followed by the supervision credential. Within five years, approximately 40% of all participants plan to hold a principal's and/or supervisor's credential.

Future Plans for Graduate Study

Participants were questioned as to their future plans for graduate studies. Their responses, by code group, were as follows:

- Code 1 participants plan almost exclusively to concentrate their graduate studies in the area of "educational media" (83%). Only 5% are not planning to do more graduate work. Approximately 12% are planning "some" graduate work, but with an indefinite goal. The majority (57%) will seek a doctorate; 10% plan to seek a master's degree. Another 15% (approximately) plan to direct their graduate work toward obtaining a specialist degree or credential.
- Code 2 participants plan largely on doing graduate work in "educational media" (62%). About 17% are not planning more graduate work; 19% have "some" plans, but with an indefinite goal. Six per cent plan to obtain only a specialist degree or credential, 23% plan a master's degree, and 32% the doctorate.
- Code 3 participants also plan graduate work emphasizing "educational media" (58%). A few plan graduate studies in "librarianship" (4%). About 19% have "some," but indefinite, plans for more graduate work; about 15% plan to do no graduate work. About a third (35%) of Code 3 participants plan to earn the master's degree, 16% plan to obtain the doctorate, and 10% plan to obtain only a specialist degree or credential.

TABLE 3-2

"NEW MEDIA" COURSES COMPLETED[a]
(MEDIA SPECIALISTS)

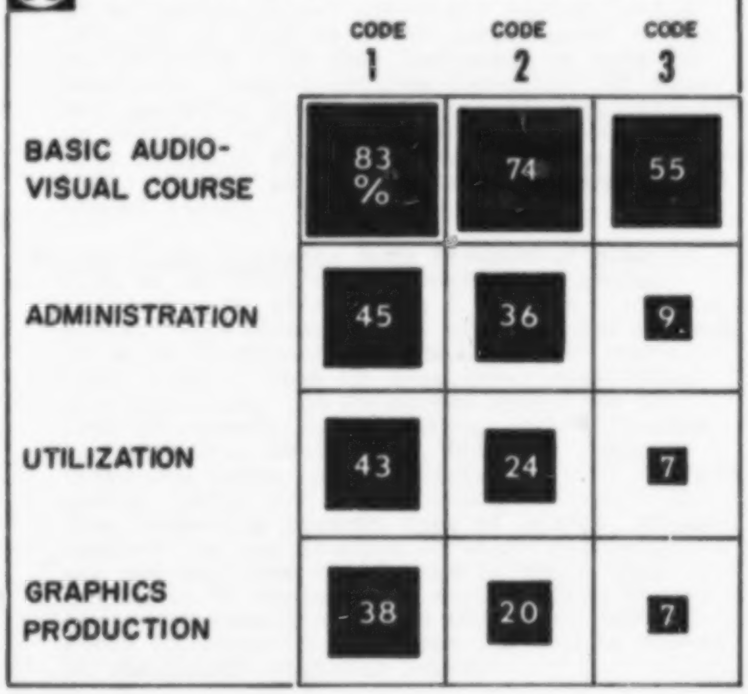
	Code 1	Code 2	Code 3
Basic (first, or general) audio-visual course	83	74	55
Administration of audio-visual or educational media	45	36	9
Utilization of educational media	43	24	7
Evaluation of educational media	27	14	3
Research problems in educational media	23	14	4
TV production and/or utilization	23	23	6
Motion picture photography	8	11	2
Librarianship (all areas)	15	12	12
Graphics production	38	20	7
Radio education	20	16	5
Still photography	27	17	4
Programmed instruction	15	9	3

[a] Percentage of participants who have completed a separate, formal college course in these areas.

Previously Completed "New Media" Courses

Participants in educational media specialist institutes were also asked to indicate the "new media" fields in which they had previously completed formal, separate, college courses. Results are shown in Table 3-2 and Figure 3-3. Those who had completed a basic audio-visual course were as follows: Code 1, 83%; Code 2, 74%, Code 3, 55%. For those completing a course in administration of audio-visual or educational media services, the responses were: Code 1, 45%; Code 2, 36%; Code 3, 9%. For those completing a graphics

FIGURE 3-3. NEW MEDIA COURSES COMPLETED



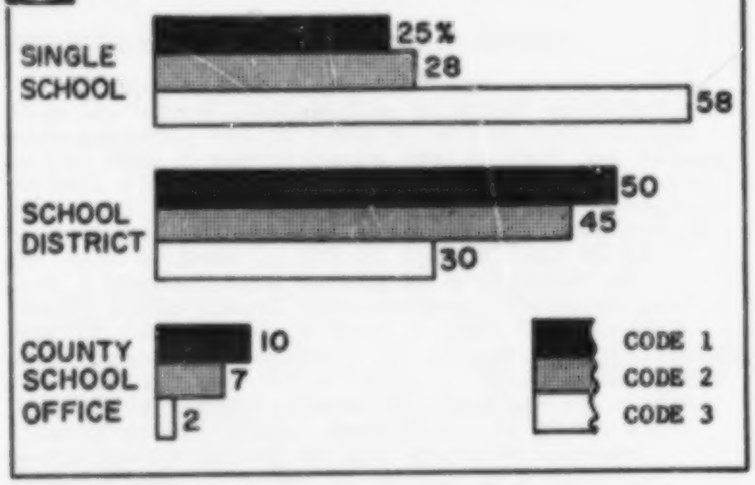
production course, the responses were: Code 1, 38%; Code 2, 20%; Code 3, 7%. The responses for a course in the utilization of educational media were: Code 1, 43%; Code 2, 24%; Code 3, 7%. About 12% of all participants also indicated that they had completed some courses in librarianship.

While the general educational background of educational media specialists appears to be substantial in the light of degrees attained and semester units completed, their preparation in specific "new media" courses is somewhat lacking. This deficiency applies not only to Code 3 and Code 2 participants, but to Code 1 participants as well.

Present Employment (Level)

The level of employment for Summer 1965 participants in the educational media specialist institutes is indicated in Figure 3-4. During 1965-1966, 25% of Code 1, 28% of Code 2, and 58% of Code 3 participants will be employed in a single school. In the same period, 50% of Code 1, 45% of Code 2, and 30% of Code 3 participants will be employed in a school district. Only 10% of Code 1, 7% of Code 2, and 2% of Code 3 participants will be employed in a county school office, while 1% of all participants will be employed in each of the following: state school office, junior college, college or university.

FIGURE 3-4. LEVEL OF EMPLOYMENT



Present Positions

The positions which educational media specialist institute participants will hold during the 1965-1966 academic year are enumerated in Table 3-3. Approximately 48% of Code 1, 33% of Code 2, and 8% of Code 3 participants are employed as full-time educational media specialists. Twenty-two per cent of Code 1, 23% of Code 2, and 38% of Code 3 participants are employed as combination part-time educational media specialists and part-time classroom teachers. Seventeen per cent of Code 1, 12% of Code 2, and 6% of Code 3 participants spend the majority of their time as supervisors. Three per cent of Code 1, 7% of Code 2, and 20% of Code 3 participants are employed as classroom teachers. Some 3% of Code 1, 5% of Code 2, and 9% of Code 3 participants are employed as librarians. Three per cent of Code 1, 9% of Code 2, and 15% of Code 3 participants are employed as principals. Less than 1% of all participants are listed as college professors or professional college workers.

TABLE 3-3

PRESENT POSITIONS (MEDIA SPECIALISTS)[a]

	Code 1	 2	 3
Part-time educational media specialist and part-time teacher	22	23	38
Full-time educational media specialist	48	33	8
Classroom teacher	3	7	20
Supervisor	17	12	6
Librarian	3	5	9
Principal	3	9	15
Superintendent	3	6	2
College professor	0	1	1-
Professional college worker	0	1	0

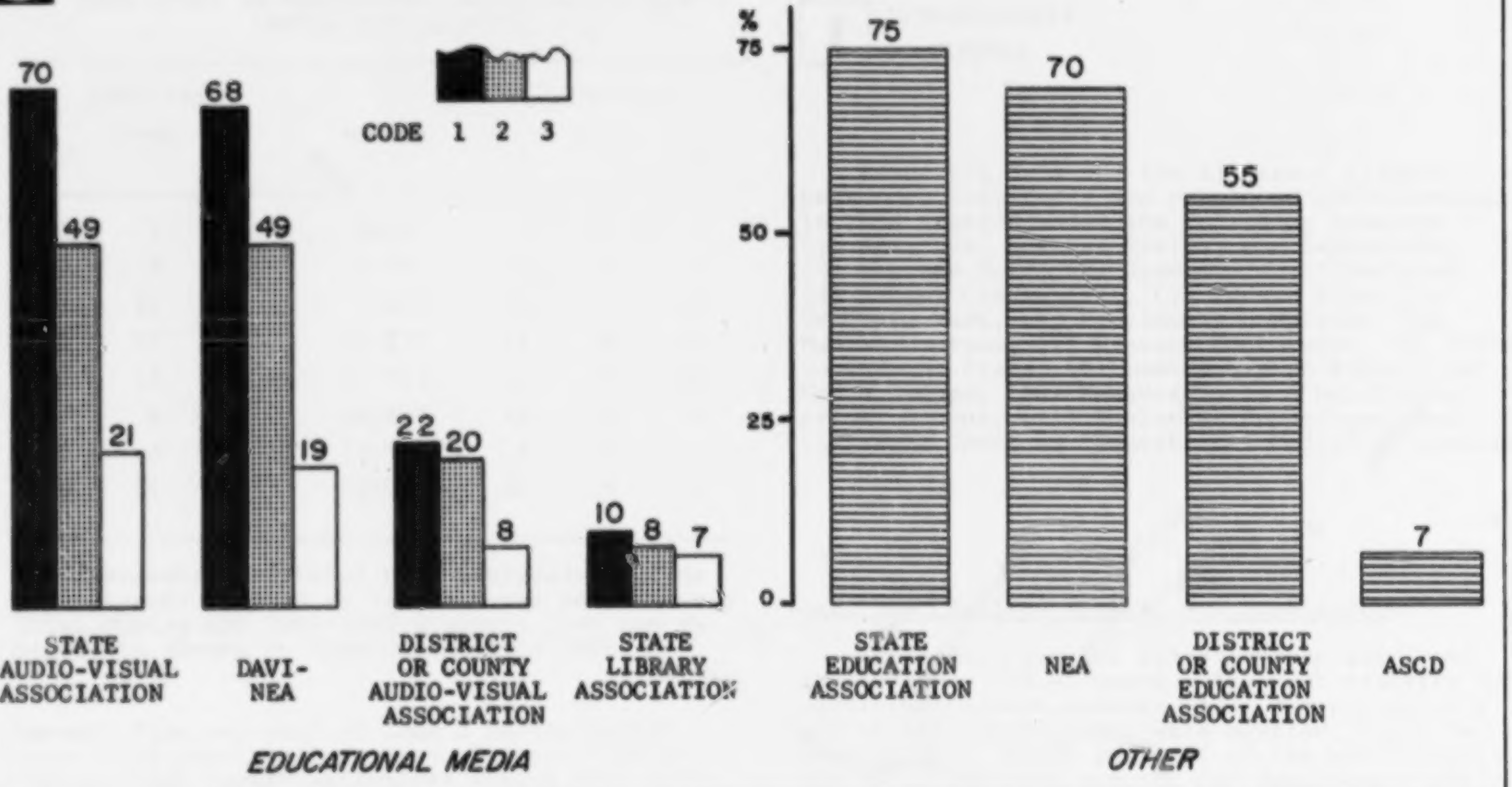
[a] Percentage of participants employed in school occupations during the 1965-1966 academic year.

Future Employment Plans

Participants were asked to describe the kinds of work they would like to be doing and that they thought they had a reasonable chance of doing within the next five years. Responses, by code groups, are as follows:

- Code 1 participants generally plan to work at an instructional materials center (50%), but 22% plan to work as an AV coordinator. Very few (2%) have specific plans to work in some other administrative capacity. There is some interest in college teaching among the participants (10%). Of the students who specified the type of school, organization, or institution in which they would expect or desire to work, the most frequent responses were: school district (74%), single school (10%), and county school office (2%).
- Code 2 participants have somewhat more diverse work plans. Approximately 35% plan to work at an instructional materials center, while 18% plan to work as an AV coordinator. About 9% indicated that they had plans to work in some other administrative capacity. Of those who specified the type of school, organization, or institution in which they would work, the most frequent responses were: school district (58%), county school office (15%), and single school (12%).
- Code 3 participants less frequently plan to work at an instructional materials center (32%) than do either Code 1 or Code 2 participants. Approximately 24% of them plan to work as an AV coordinator. A substantial number (19%) plan to work in some other administrative position. Of those who specified the type of school, organization, or institution in which they would work, the most frequent responses were: school district (45%), single school (40%), and county school office (5%). When comparing present type of school, organization, or institution in which participants are now employed with those in which they expect to be employed in another five years, there was some indication that most participants intended to move from the single school to the school district level.

FIGURE 3-5. MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS



Membership in Educational Media Groups

In response to a question concerning membership in "educational media-oriented" professional associations, 68% of Code 1, 49% of Code 2, and 19% of Code 3 participants stated they now belong to DAVI (NEA). Approximately 70% of Code 1, 49% of Code 2, and 21% of Code 3 participants belong to a state audio-visual association. Twenty-two per cent of Code 1, 20% of Code 2, and 8% of Code 3 participants belong to a district or county audio-visual association. Thirteen per cent of Code 1, 7% of Code 2, and 7% of Code 3 participants are members of a state school library association, and 10% of Code 1, 8% of Code 2, and 7% of Code 3 participants are members of a state library association. Approximately 6% of all participants belong to the American Library Association. Another 6% belong to a district or a county library association. Only 3% of all participants belong to each of the following: National Association of Educational Broadcasters, American Association of School Librarians.

Membership in Other Professional Groups

Participants were also questioned regarding membership in other professional organizations (see Figure 3-5). Membership appears highest at the state level; 75% of all participants belong to a state educational association. Approximately 70% of all participants are members of the National Education Association; 55% are members of district or county educational associations. Five per cent of Code 3, 12% of Code 2, and 13% of Code 1 participants are members of the Association for Supervision and Curriculum Development. About 1% of all participants belong to the Association for Higher Education, 1% to the American Association of University Professors, and 6% to the American Federation of Teachers. Differences in percentages between code groups appeared to be insignificant.

Membership of Summer 1965 media institute participants in both "educational media-oriented" and "other" professional organizations is highest at the state level, followed closely by national, and then district or county levels. While percentages of membership in "other" professional organizations were quite uniform for the three code groups, there were sharp differences among code groups in "educational media-oriented" organization membership.

Employees Supervised

Participants were asked to indicate the number of employees directly responsible to them during the 1965-1966 academic year. More than 30% of all participants will have no part-time non-professional employees under them, while approximately 50% will have three or fewer. For all participants, 57% will have no full-time non-professional employees under them. In all, 62% will have no full-time professional employees under them.

Time Spent in "Educational Media" Activities

Participants were asked: (1) what percentage of their total paid professional time was devoted, during the 1964-1965 academic year, to "educational media" activities, and (2) what percentage of time they expected to devote to those activities during 1965-1966 (see Table 3-4 and Figure 3-6). While 26% of Code 1 participants devoted one-fourth or less of their time to "educational media" activities during 1964-1965, only 16% expect to spend this little amount of time on them during 1965-1966. Approximately 43% of the Code 2 participants spent only one-fourth or less of their time on "educational media" activities during 1964-1965, and for 1965-1966 this figure was predicted to fall to 25% (a decrease of 18%).

TABLE 3-4

TIME SPENT IN EDUCATIONAL MEDIA ACTIVITIES[a]
(MEDIA SPECIALISTS)

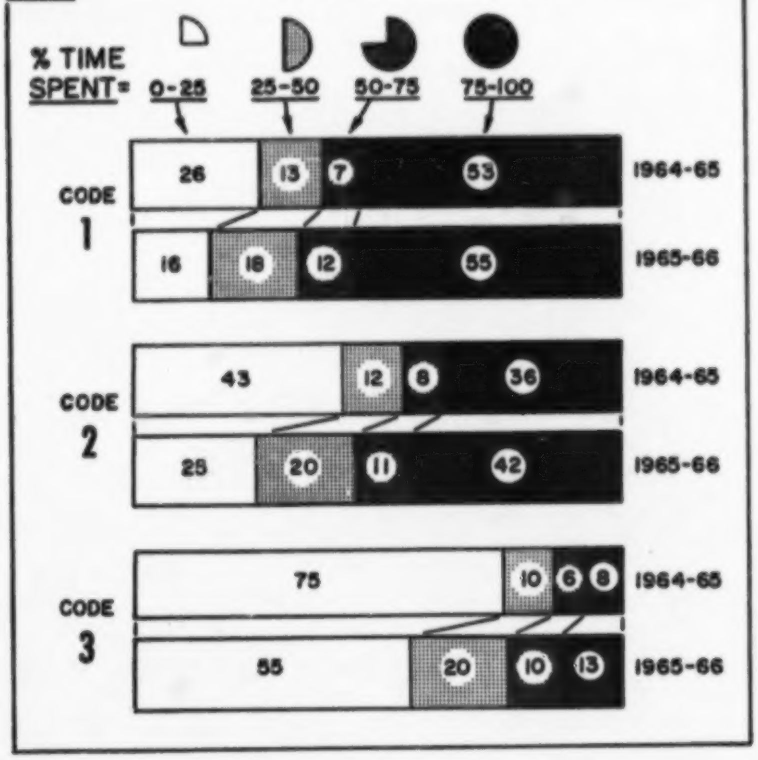
1964-1965 Code 1	2	3	Amount	1965-1966 Code 1	2	3
5	7	14	None	2	2	2
3	7	19	1-5%	2	1	4
5	12	22	5-10%	0	6	16
13	17	20	10-25%	12	16	33
13	12	10	25-50%	18	20	20
7	8	6	50-75%	12	11	10
5	5	2	75-99%	5	6	4
48	31	5	100%	50	36	9

[a] Percentage of total paid professional time participants devoted to "educational media" activities during the 1964-1965 academic year and expected to devote to them during 1965-1966.

Seventy-five per cent of Code 3 participants spent only one-fourth or less of their time in "educational media" activities during 1964-1965, and during 1965-1966 55% expected to spend this amount of time (a decrease of 20%).

During 1964-1965, on the other hand, 60% of Code 1, 44% of Code 2, and 13% of Code 3 participants devoted more than one-half of their total paid professional time to "educational media" activities. For 1965-1966, the number of participants who expected to spend more than half their time on such activities was expected to increase by 7%, 9%, and 10% for Codes 1, 2, and 3, respectively.

FIGURE 3-6. TIME SPENT IN ED. MEDIA ACTIVITIES



B LIBRARIANSHIP INSTITUTES

Resulting data for the 13 school library personnel institutes are presented and discussed in this section under the following headings: (1) Age, Sex, Marital Status, and Dependents, (2) Degrees Held, (3) Graduate Work Completed, (4) School Credentials, (5) Future Plans for Graduate Work, (6) Previously Completed "New Media" Courses, (7) Present Employment, (8) Future Employment Plans, (9) Membership in Educational Media Groups, (10) Membership in Other Professional Groups, (11) Employees Supervised, and (12) Time Spent in "Educational Media" Activities.

Age, Sex, Marital Status, and Dependents

The median age for librarianship institute participants was 45 years. The vast majority of participants were females (87%). Approximately 63% of all participants were married, while 24% were single. Sixty per cent of the participants did not claim NDEA support for dependents, while 14% claimed one, 10% claimed two, 9% claimed three, 4% claimed four, and 4% claimed five or more.

Degrees Held

Participants were asked to indicate the status of their graduate studies in terms of degrees attained (see Table 3-5). Of all participants, 11% had completed no graduate work, 36% had completed some graduate work but had not yet obtained a master's degree, 17% had completed a master's degree, 35% had completed a master's degree and some additional graduate work but had not obtained a doctorate, and less than 1% had completed a doctorate. Fifty-two per cent of all participants (10% of Code 3, 40% of Code 2, and 90% of Code 1 participants) had completed at least a master's degree.

TABLE 3-5

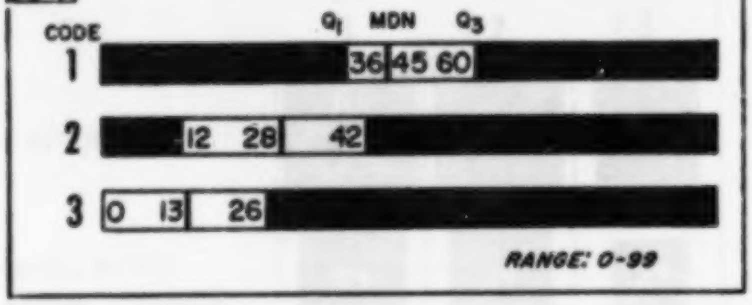
DEGREES HELD (LIBRARIANS)

	Code 1	2	3
Bachelor's degree, but no graduate work	2	17	23
Bachelor's degree, plus some graduate work	7	43	57
Master's degree, but no work beyond it	38	9	0
Master's degree, plus some additional work	52	31	10
Doctorate, but no post-doctorate work	1	0	0
Doctorate, plus some post-doctorate work	0	0	0

Graduate Work Completed

For all participants, the median number of semester units of graduate work completed prior to the institute was 36. The average Code 1 participant had completed 45 units, the Code 2 participant 28 units, and the Code 3 participant 13 units of graduate work. Of Code 1, Code 2, and Code 3 participants, 25% had completed more than 60, 42, and 26 units, respectively. Of Code 1 participants, 75% had completed at least 36 units. Of Code 2 participants, 75% had completed at least 12 units. Approximately 25% of Code 3 participants had completed no graduate work.

FIGURE 3-7. GRADUATE UNITS COMPLETED



School Credentials

The typical librarianship institute participant held more than one school service credential or certificate. Of Code 1 participants, 88% held a librarianship, 78% held a secondary, and 37% held an elementary credential or certificate. Of Code 2 participants, 83% held a librarianship, 57% held a secondary, and 57% held an elementary credential or certificate. Of Code 3 participants, 30% held a librarianship, 63% held a secondary, and 27% held an elementary credential or certificate. Four per cent or less of all participants held credentials or certificates for junior college, supervision, principal, superintendent, counselor, or special education.

Future Plans for Graduate Work

All Summer 1965 school librarianship institute participants not holding credentials or certificates in librarianship expected to have at least one within five years. With the exception of a supervision credential (which 15% of all participants expected to obtain), less than 3% of all participants expected within five years to hold a credential or certificate in an area (counselor, junior college, etc.) outside the field of librarianship.

Only 17% of all librarianship institute participants did not have plans for completing additional graduate work. Approximately 25% planned "some" graduate study--but with an "indefinite" goal. Nearly 50% intended to concentrate their studies in "librarianship"; about 10% will do more graduate work in "educational media."

Of all participants, 47% hope to earn master's degrees, 8% the doctorate, and 4% only a specialist credential or certificate.

When participants' plans for future graduate studies are broken down by code group, the following factors emerge:

- Code 1 participants have diverse plans for graduate work. Since most of them already hold master's degrees (and/or work as library supervisors), it is perhaps not surprising that only 16% plan more work in "librarianship." But 12% plan additional graduate work in "educational media"; 8% plan to obtain master's degrees and 19% the doctorate.
- Code 2 participants tend more to concentrate plans on graduate work in "librarianship" (61%). Only 7% plan more graduate work in "educational media." They emphasize earning master's degrees (63%) rather than doctorates (4%).
- Code 3 participants also plan graduate work emphasizing "librarianship" (63%). Approximately 73% will seek master's degrees.

Previously Completed "New Media" Courses

Participants in librarianship institutes were asked to indicate the "new media" fields in which they have previously completed a formal, separate, college course. (Results are shown in Table 3-6 and Figure 3-8.) For the area of librarianship, the responses were: Code 1, 85%; Code 2, 85%; and Code 3, 54%. For a basic audio-visual course, the responses were: Code 1, 53%; Code 2, 48%; Code 3, 27%. For a course in the administration of audio-visual or educational media services, the responses were: Code 1, 7%; Code 2, 13%; and Code 3, 3%. For a course in the evaluation

TABLE 3-6

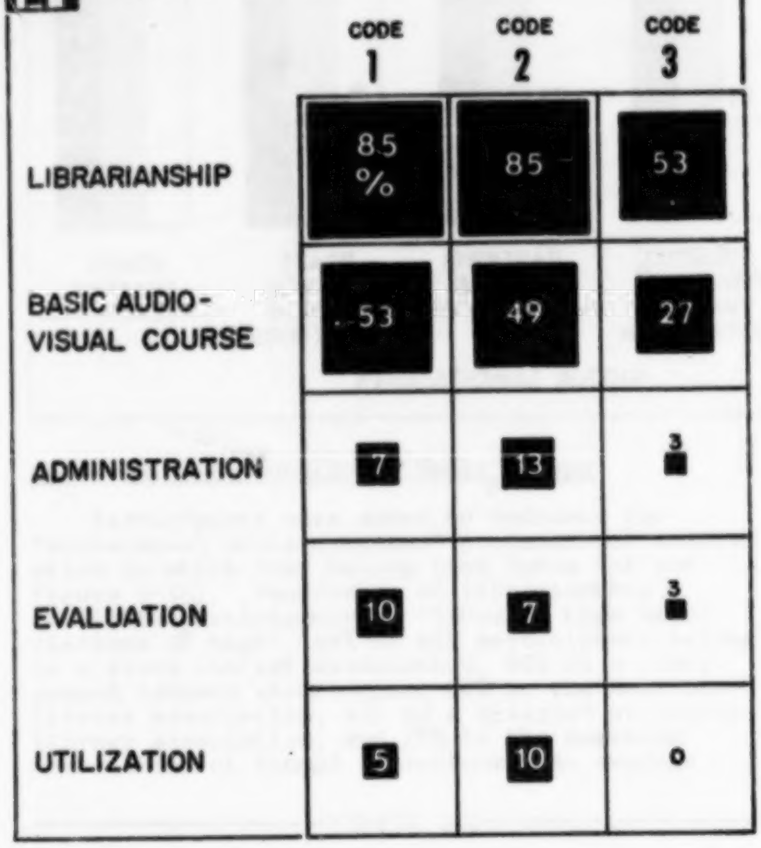
"NEW MEDIA" COURSES COMPLETED[a]
(LIBRARIANS)

	Code		
	1	2	3
Basic (first, or general) audio-visual course	53	48	27
Radio education	3	2	0
TV production and/or utilization	5	2	0
Graphics production	3	3	0
Still photography	0	2	3
Programmed instruction	1	4	0
Motion picture photography	0	1	3
Administration of audio-visual or educational media	7	13	3
Librarianship (all areas)	85	85	53
Evaluation of educational media	10	7	3
Utilization of educational media	5	10	0
Research problems in educational media	3	7	3

[a] Percentage of participants who have completed a separate, formal college course in these areas.

of educational media, the responses were: Code 1, 10%; Code 2, 7%; and Code 3, 3%. For a course in utilization of educational media, the responses were: Code 1, 5%; Code 2, 10%; and Code 3, none. Five per cent or less of all participants had completed a course in each of the areas of radio education, television, graphics, still or motion picture photography, programmed instruction, and research problems in educational media. On an over-all basis, there appeared to be little difference between Code 1 and Code 2 participants with respect to the number of "new media" courses they had completed, but Code 3 participants were shown to have completed considerably fewer courses (including those in their own field).

FIGURE 3-8. NEW MEDIA COURSES COMPLETED



Present Employment (Level)

The majority of librarianship institute participants indicated that they expect to be employed in a single school during the 1965-1966 academic year (see Table 3-7 and Figure 3-9). Fifty per cent of Code 1, 65% of Code 2, and 67% of Code 3 participants will be employed in a single school. Those who will be employed in a school district are: Code 1, 34%; Code 2, 24%; and Code 3, 10%. Five per cent of Code 1, 9% of Code 2, and 20% of Code 3 participants will be employed in a group of schools. With the exception of 5% of the Code 1 participants who will be employed in a county school office, 1% or less of the participants will work in each of the following: state school office, county school office, junior college, or university. Approximately 2% of all participants will be employed in some other school or organization than those listed in Table 3-7.

FIGURE 3-9. LEVEL OF EMPLOYMENT

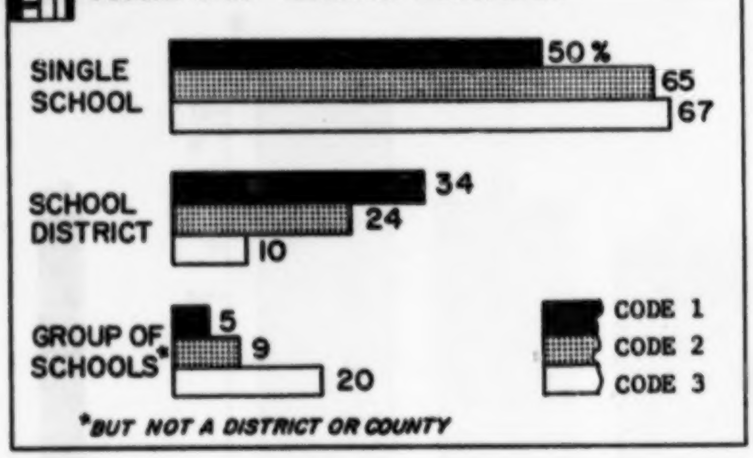


TABLE 3-7

PRESENT EMPLOYMENT (LIBRARIANS)[a]

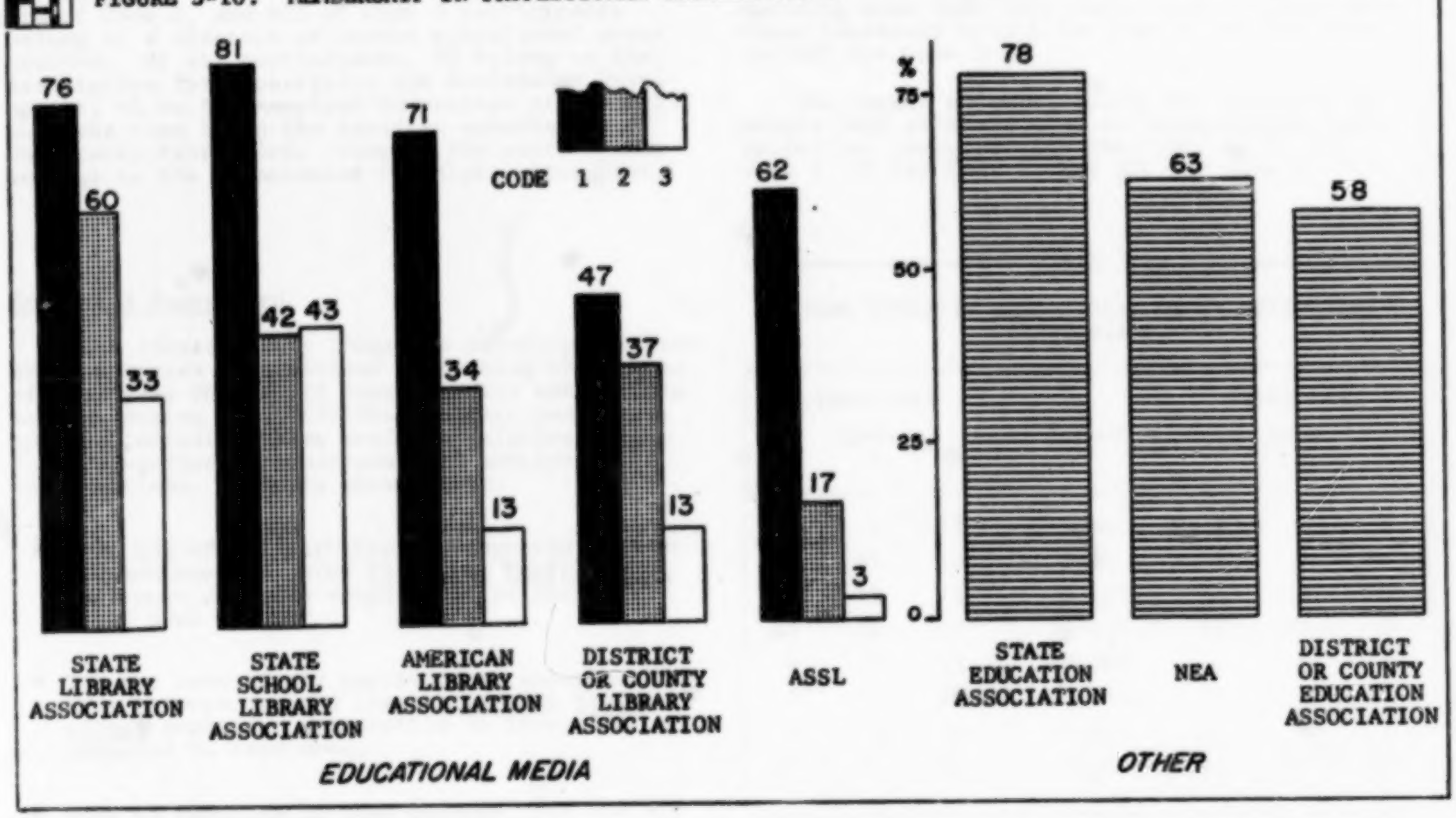
	Code 1	Code 2	Code 3
A group of schools, but not a county or district	5	9	20
A single school	50	65	67
A school district	34	24	10
A county school office	5	0	0
A state school office	0	0	0
A college or university	0	1-	0
A junior college	0	0	0

[a] Type of school, organization, or institution in which participants will be employed during the 1965-1966 academic year.

Future Employment Plans

Participants were asked to describe the kind of work they would like to be doing and that they thought they had a reasonable chance of doing within the next five years. Nearly all participants showed, by their responses, an interest in expanding their present "library" to include so-called "new media" functions. Approximately a third of the participants had definite plans to combine "library" and "new media" services in their assignments. A large majority of all respondents plan to work in a single school rather than in multiple school or school district organizations.

FIGURE 3-10. MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS



Membership in Educational Media Groups

Participants were asked to indicate the "educational media-oriented" professional association to which they belong (see Table 3-8 and Figure 3-10). Membership of librarianship institute participants in "library" type associations is high: 66% of all participants belong to a state library association, 60% to a state school library association, 42% to the American Library Association, 41% to a district or county library association, and 29% to the American Association of School Librarians. An average of approximately 67% of Code 1, 38% of Code 2, and 21% of Code 3 participants belong to each of the five associations enumerated above. Approximately 3% of all participants belong to DAVI (NEA), 5% to a state audio-visual association, 2% to a district or county audio-visual association, and less than 1% to the National Association of Educational Broadcasters.

TABLE 3-8

MEMBERSHIP IN EDUCATIONAL MEDIA GROUPS
(LIBRARIANS)

	Code 1	 2	 3
Department of Audio-Visual Instruction	5	3	0
American Library Association	71	34	13
State Library Association	76	60	33
American Association of School Librarians	62	17	3
State School Library Association	81	42	43
State Audio-Visual Association	8	3	3
District or County Library Association	47	37	13
District or County Audio-Visual Association	5	1	3
National Association of Educational Broadcasters	1	1	0

Membership in Other Professional Groups

Responses to a question concerning membership in other professional organizations indicate that 83% of Code 1, 72% of Code 2, and 63% of Code 3 participants belong to a state educational association (see Table 3-9 and Figure 3-10). Membership in the National Education Association is 72%

TABLE 3-9

MEMBERSHIP IN OTHER PROFESSIONAL GROUPS
(LIBRARIANS)

	Code 1	 2	 3
National Education Association	72	61	43
Association for Higher Education	0	0	0
Association for Supervision and Curriculum Development (ASCD)	8	1-	0
State Education Association	83	72	63
District or County Education Association	63	51	40
American Federation of Teachers	8	5	0
American Association of University Professors	1	0	0

for Code 1, 61% for Code 2, and 43% for Code 3 participants. Sixty-three per cent of Code 1, 51% of Code 2, and 40% of Code 3 participants belong to a district or county educational association. Of all participants, 3% belong to the Association for Supervision and Curriculum Development, 4% to the American Federation of Teachers, and less than 1% to the American Association of University Professors. None of the participants belongs to the Association for Higher Education.

Employees Supervised

When librarianship institute participants were asked a series of questions concerning the number of employees they would have directly responsible to them during the 1965-1966 academic year, responses indicated there would be relatively few. Four categories of employees were considered in the questions. Results showed that:

- Only 15% of all participants expected to have between one and three full-time professional employees directly responsible to them; 79% would have none.
- Ten per cent of all participants expected to have between one and three part-time professional employees responsible to them; 86% expected to have none.
- Only 4% expected to have between four and six full-time non-professional employees responsible to them; 65% expected none.
- A total of 21% of all participants expected to have no part-time non-professional employees responsible to them, 16% between one and three, 10% between four and six, 6% between seven and nine, 8% between 10 and twelve, 10% between thirteen and fifteen, and 27% more than fifteen.

Time Spent in "Educational Media" Activities

Participants were asked: (1) what percentage of their total paid professional time was devoted, during the 1964-1965 academic year, to "educational media" activities and (2) what percentage of time they expected to devote to these activities during 1965-1966 (see Table 3-10 and Figure 3-11). Responses of Code 1 participants indicated that while 58% devoted one-fourth or less of their time to "educational media" activities during 1964-1965, only 51% expected to spend this amount of time on them during 1965-1966. Approximately 54% of Code 2 participants spent one-fourth or less of their time carrying out "educational media" activities during 1964-1965; during 1965-1966 this figure was expected to fall to 51%. Of Code 3 participants, 26% spent during 1964-1965 and 19% expected to spend during 1965-1966 one-fourth or less of their time on "educational media" activities.

During 1964-1965, 36% of Code 1, 38% of Code 2, and 53% of Code 3 participants devoted more than half their total paid professional time to "educational media" activities. By 1965-1966, the number of participants who expected to be spending more than half their time on these activities increased by 5% for Code 1, 0% for Code 2, and 20% for Code 3.

The number of participants who expected to devote 100% of their time on "educational media" activities increased for 1965-1966 by 6% for Code 1, 0% for Code 2, and 20% for Code 3.

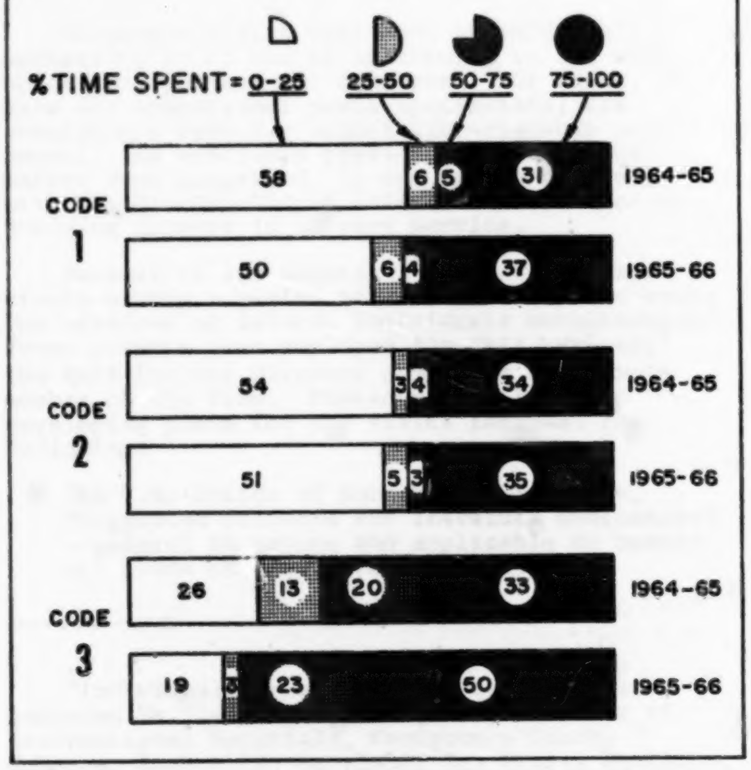
TABLE 3-10

TIME SPENT IN EDUCATIONAL MEDIA ACTIVITIES[a] (LIBRARIANS)

1964-1965 Code 1	1964-1965 Code 2	1964-1965 Code 3	Amount	1965-1966 Code 1	1965-1966 Code 2	1965-1966 Code 3
11	6	13	None	2	4	3
20	21	3	1-5%	6	9	10
16	17	3	5-10%	19	18	3
11	10	7	10-25%	23	20	3
6	3	13	25-50%	6	5	3
5	4	20	50-75%	4	3	23
4	3	10	75-99%	4	4	7
27	31	23	100%	33	31	43

[a] Percentage of total paid professional time participants devoted to "educational media" activities during the 1964-1965 academic year and expected to devote to them during 1965-1966.

FIGURE 3-11. TIME SPENT IN ED. MEDIA ACTIVITIES



Chapter 4

ON-SITE VISITORS' REPORTS

In-person visits were made by EMIE staff members to 24 of the 49 institutes in all with which this project was concerned. Of these, 18 were for educational media specialists; the remaining 6 were for school librarianship personnel. As mentioned previously, all of the latter were concerned, in one way or another, with the "instructional materials center" as an emerging concept in library service.

Because it was necessary to conduct these visits within a period of approximately six weeks, the services of several individuals were required. Three persons were employed for this purpose;[1] the EMIE Project Director comprised the fourth member of the team. Procedures employed in developing plans for the visits included the following:

- The U.S. Office of Education guidelines, "Suggested Criteria for Institute Evaluators"--general in nature and applicable to nearly all kinds of institutes--were studied.

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[1] Individuals selected for this assignment included Dr. James W. Jacobs, Jr., Director of Instructional Materials, Montgomery County Schools, Rockville, Maryland; Dr. Murray Phillips, Associate Professor of Education, Hofstra University; and Dr. Leslie P. Greenhill, Director, Division of Academic Services, Pennsylvania State University.

- A rough draft was developed of suggested steps, criteria, and procedures for conducting on-site evaluations with special attention to questions and suggestions for observation that pertained particularly to educational media matters. This material was submitted for criticism to members of the EMIE Advisory Board and to the three individuals employed especially to conduct such visits.
- A smooth version of an "On-site Visitors' Portfolio" was developed on the basis of these suggestions and discussed (by mail and telephone) with the four on-site visitors. Questions and problems pertaining to its use were settled at that time.
- Copies of the portfolio and a full explanation of its intended uses were then sent to the 24 directors whose institutes were to be visited. On-site visitors and directors arranged a mutually satisfactory visiting schedule. The recommended period for these visits was during the last two or three weeks of a six-week session or at the beginning of the last week for institutes having shorter sessions. Each visit was planned to last no more than two days.

In a letter to directors (with a copy of the portfolio) to be visited for this phase of the EMIE program, the point was made that visitors would emphasize positive aspects of institute activities and seek to assess ways of improving the contributions to be made by institutes in the professional development of educational media and school librarianship personnel. It was expected that these visits would facilitate the collection of additional valuable data about the institutes of a kind that could not possibly be obtained through usual paper-and-pencil procedures.

Selecting Institutes to Be Visited

Institutes selected for on-site visits were drawn from the larger population of 49 institutes (36 for educational media specialists and 13 for school librarianship personnel) involved in the total EMIE study. Some of the same criteria that applied in selecting the original 13 librarianship institutes (discussed earlier in Chapter 1) applied also in making these decisions. Here again, advice with regard to the selection of institutes was sought and obtained from members of the staff of the U.S. Office of Education.

Educational media specialist and school librarianship institutes finally selected represented a reasonable distribution of Code 1, 2, and 3 levels of preparation. Educational media specialist institutes were drawn from among those focusing upon the preparation of individuals for service in single buildings and in multiple building organizations (districts, counties, or others) as well as upon special activities such as television, 8mm film production, or programmed instruction. To insure having ample time in which to conduct on-site visits, it was necessary to consider the calendar. Institutes beginning before completion of the PERSONAL INFORMATION FORM, the information test, or the attitudes scale (all considered elements in the intensive study of any institute to be visited in person) could not be used. Finally, attention was given to geography so as to provide a reasonable distribution of locations in various parts of the United States that might be considered to reflect conditions of the country as a whole.

The On-site Visitors' Portfolio

The portfolio for on-site visitors to the 24 selected Summer 1965 institutes for educational media specialists and school librarianship personnel included the following suggestions and guidelines:

Preliminary

The on-site visitor to educational media and librarianship institutes has a difficult task to perform. In the short period of two days he will attempt to obtain a variety of impressions and facts with which to assess an institute fairly. The plan of procedure suggested here aims to systematize those assessments in an effort to provide appraisals of comparable worth. It is expected that, in advance of your visit, you will:

1. Do your homework. Each institute director has been requested by the EMIE Project office to forward the following materials to persons selected to perform on-site visits:

   *A copy of the approved proposal for the NDEA institute, including a copy of the budget

   *A map of the locality of the institute

   *Information concerning travel and housing-dining accommodations for you

   *Information concerning special events, if any, that will be under way while you are on-site

   *A statement concerning whether or not graduate credit is given for the institute

   Study these materials in advance. Familiarize yourself with the kinds of questions you should ask and the data you should obtain to produce a fair evaluation of institutes for which you are responsible.

   If you need additional information about institutes you are to visit, feel free to request it from the directors concerned.

2. Arrange suitable dates for visits. It is the on-site visitor's responsibility to arrange dates for his own visits. Dates selected should be satisfactory to institute directors as well. Preferred times of visits to six-week institutes are during the period between the beginning of the fourth week and the beginning of the sixth week. Shorter institutes may possibly be visited past the midpoint of the session and as late as the first two days of the last five-day week.

Making the Visit

The following suggestions are intended to provide background and guidance for those conducting on-site visits:

1. Make immediate contact with the institute director. If possible, reach the institute the afternoon before your visit and have a special session with the director. He can supply the unity and direction needed to make the experience of the visit worthwhile. You should expect that he will introduce you to his staff and student participants at the beginning of your visit, after you have had the opportunity

to go over the general plan for your two days. Arrange at this time to have a final conference with him at the conclusion of your visit.

2. Get acquainted with the institute program. Go through a participant's whole day in order to obtain a clear conception of the study load. If you arrive too late for complete initial talks with the director, delay starting until they are completed and finish class visits the morning of the second day. It is expected that, in most cases, participants' mornings will be filled with classes.

3. Visit classes. If the institute schedule is simple enough to allow you to visit each class for a whole period on one day, do so. If it is more complicated, choose a schedule to allow you to see each staff member in action for a reasonable time--perhaps less than a full period. Be sure the director has explained the necessity for shorter visits so that your leaving early will not be interpreted as rudeness. In observing classes, look especially for evidence of good teaching.

4. Note any special activities. Have plans been made for any or all of the following in connection with the institute: (a) special exhibits of new instructional materials--books, films, filmstrips, recordings, charts, and the like, (b) special demonstrations in techniques and standards for selecting and/or using these materials in teaching, (c) lectures on new materials selection and/or utilization by special consultants, and (d) field trips to obtain firsthand familiarity with facilities or resources related to the institute's field of study?

5. Appraise staff capabilities and performance. Analysis of background data on staff members will be of assistance here. Classroom and laboratory observations will also help. Seek information to answer such questions as the following: Do staff members appear to know and to be acting on a knowledge of objectives of the institute? Is there a suitable division of responsibility among staff members? Is there a spirit of cooperation? Is there evidence of good teaching? Are staff members conversant with problems of teachers at elementary and/or secondary levels?

6. Be available for consultation and conference. Formal consultation might be held with a group of participants at some stated time and place or merely by announcing your availability for conferences. To set up a meeting with all participants, without the director or staff, however, may only lead to a gripe session in which participants criticize what they do not yet understand. But this situation might also provide the chance to increase morale by explaining institute goals or answering important questions. Give a group conference or lecture only at the request of the director. As a visitor, do all you can to avoid the appearance of being an inquisitor.

7. Study living and dining arrangements. There are obvious advantages to be derived from placing yourself entirely in the place of participants. Tell the director if you prefer to stay in a dormitory while you are on campus. If you choose not to, you should spend some time there to see what life is like. Ask also to be shown one or more rental apartments available to institute participants with families. If possible, take meals in the dining rooms usually patronized by institute participants.

8. Attend institute staff meetings, student committee meetings, or special conferences or lectures. Such attendance may provide considerable insight concerning institute effectiveness.

9. Talk with and observe students. Without in any way seeking to "snoop," get acquainted with institute students. Note signs of enthusiasm for or boredom with work. Look also for evidence of outstanding student products (outcomes of class work), projects under way, and the like. Talk to students concerning their impressions of the institute and the extent to which they believe their goals are being met. Do they have suggestions to make concerning ways in which educational media or school librarianship institutes can be improved? What particular strengths do they observe in the institute they are attending?

10. Study the recreational program. What plans are made for participants who remain on campus over the weekends? Are special plans made to provide recreation for both married and single students? Are wives and children given special attention? The director should have announced in advance which weekends are free. He should have planned a full schedule of activities for other weekends, but these activities should not be compulsory. Is it possible to assess the effects of weekend arrangements upon the morale of participants?

11. Study physical facilities. Are institute facilities adequate to needs? Are they sufficiently large? Attractive? Properly ventilated and/or air conditioned? Are laboratories properly equipped? Are there sufficient varieties and quantities of audio-visual equipment and supplies? Are acoustically treated rooms available in which recording may be done? Are preview facilities (films, slides, filmstrips, transparencies) adequate? Are the classrooms well designed for uses to which they are put? Do they include suitable applications of "new technology" appropriate to institute emphases?

12. Study instructional resources. Does the institution maintain an "instructional materials center" or "audio-visual center"? Are its facilities and resources (including those of its trained professional staff) available to institute participants and staff? Are offerings of this center adequate to needs of the institute? Has the institution's library rendered similar services with regard to "new materials" (book lists, book exhibits, special services, etc.)? Are book resources adequate?

13. Assess institutional support of the institute program. Are administrative details handled without special burden to the institute director or staff? Do the Dean of Education, the Academic Vice

President or the President take an interest in the institute? How, if at all, do they participate? Are instructional supplies and services provided, as necessary?

14. Appraise student and staff reactions to EMIE evaluation procedures and instruments. Seek reactions, especially, to the "information" test (MICE, McLaughlin, Syracuse University), the "attitudes" test (Ramsey, George Peabody College), and the "personal information" form (prepared by the EMIE staff at San Jose). Do participants recognize the value of studying the effects of institute programs upon their future work with educational media? Would they be willing to participate in a follow-up study approximately six months after the close of the institute?

15. Obtain copies of items providing valuable background data about the institute. It is hoped that on-site visitors will obtain copies of many items that will provide helpful information about different facets of institutes appraised. Especially desired are course outlines or syllabi, student assignment sheets, institute newsletters, copies of tests used in various courses, class schedules, announcements used in advertising the institutes, news clippings, and similar materials. If publicity photographs have been made, copies would be appreciated. Include, also, a copy of the General Bulletin of the institution visited.

16. Hold a final conference with the institute director. There is almost universal agreement by directors and on-site visitors that the visitor should end his assignment by talking with the director. The director is entitled to know the evaluator's opinions with respect to his institute. The final conference calls for tact and reason on the parts of both the evaluator and the institute director. The on-site visitor should report his observations honestly. While the oral comments of the final conference should reflect the general nature of the intended final written report on the institute, it will be subject to later elaboration and refinement.

On-site Visitors' Reports

A final, written report was expected from the on-site visitor following each evaluation. The suggested format for this report included the following sections:

1. General Description of the Institute--institutional characteristics, institute purposes, general data.
2. Educational Program--scope, emphases, integration, schedule, variety and imaginativeness, validity for persons enrolled.
3. Administration--plan of administration, administrative staff, attention to administrative details (pay, supplies, and the like), institutional support of the institute program.
4. Students--quality, adequacy of backgrounds, sophistication with respect to institute emphases, evident interest, special needs, morale.
5. Instruction--apparent effectiveness of teaching, quality of teaching staff, attention to staff members to ways of improving teaching, extent and depth of student participation in learning experiences.
6. Instructional Resources--extent and quality of library offerings; adequacy of laboratory equipment and supplies, source books, catalogs, and files for new educational media; access to "new media."
7. Physical Facilities--adequacy of numbers and types of classrooms, laboratories, and other physical facilities for institute sessions; attractiveness; healthfulness (air conditioning, acoustical treatment, lighting); availability and adequacy of needed specialized facilities (darkrooms, preview rooms, and the like).
8. Living Arrangements--attractiveness, adequacy, and costs of dormitory rooms, apartments, and other facilities for institute enrollees and dependents.
9. Dining Arrangements--attractiveness and adequacy of dining facilities; quality of meals; costs.
10. Recreational Arrangements--adequacy and quality of recreational programs; recreational facilities; participation in recreational activities; attention to needs of dependents; relationship of recreation to institute purposes.
11. Student Reactions to EMIE Evaluation Program--the Information Test, the Attitudes Test, and the Personal Information Form.

Because each on-site visitor worked with a number of different institutes (distributed as follows: 9, 6, 6, and 3), and delayed preparation of his separate reports until all were completed, several comparisons were possible.

Educational Program

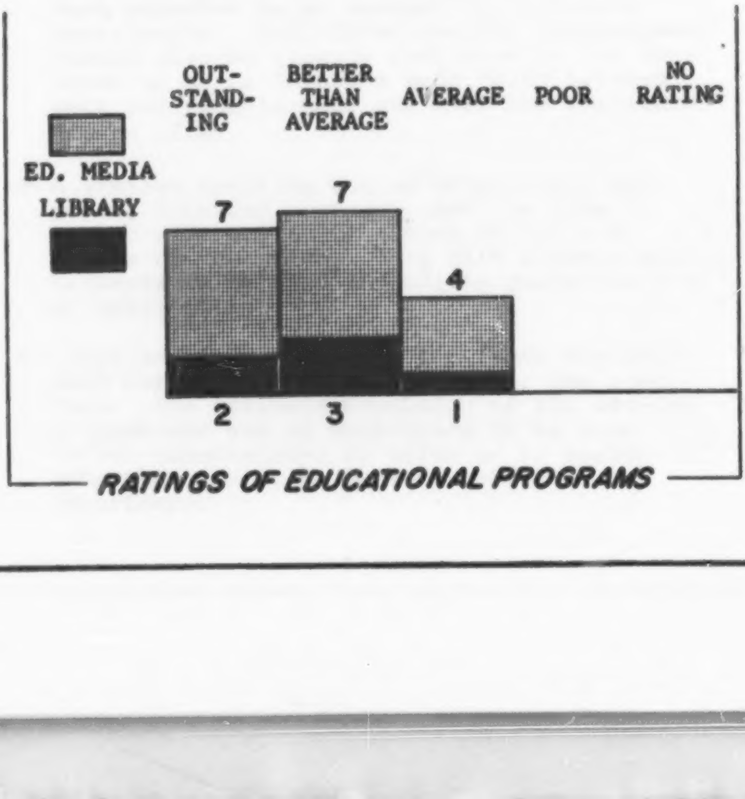
In their written evaluations, on-site visitors described the various institute programs they studied. In most cases, these programs featured a full spectrum of lectures, small group discussions, seminars, individual study periods, laboratory production activities, reading, and individual research. Each institute plan was unique in its efforts to correlate objectives, instructional activities, and resources. While most institutes visited were programmed along rather traditional course credit lines, some operated more flexibly. Visitors believed the more loosely structured programs were received better by participants than those built exclusively around separate formal courses.

From their written remarks, it was quite clear that on-site visitors favored:

- Individualization of instruction--where feasible and possible, even if it were necessary, in the process, to increase staff and budget.
- An over-all educational program format closely related to institute objectives.
- Small classes, a large staff, and adequate materials and supplies.

- A focus on practical needs of participants while, at the same time, "raising their sights" through considerations of theoretical matters, and proper utilization of new educational media.
- Sufficient time in the institute program to permit students to make full use of institute resources.
- Adequate laboratory time. Students preferred to have a great deal of available laboratory time, on both scheduled and unscheduled (at odd hours) bases. It was pointed out that, no matter how much laboratory time was available, students always seemed to want more (and this in spite of the fact that laboratories were sometimes as late as 9:00 or 10:00 o'clock at night).
- A varied, flexible schedule. Students failed to appreciate a lock-step schedule--day after day--laid out in detail in advance, with all doing the same thing at the same time. Instead, they preferred variety in class activities and opportunities to pursue problem-type activities geared more to their own special interests.
- More activity; less "sit and listen" lectures. In a few instances, it was clear, in talking with students, that lecture-listen activities were greatly overdone. Variety in activities --laboratory activities interspersed with lectures; instruction in small, medium, and large groups; field trips; and use of consultants--seemed to add interest for participants and to increase the apparent value of instruction.
- A good range of special demonstrations and lectures.
- A limiting of the scope of the educational program so that full and adequate coverage could be made for all topics presented.
- More emphasis on the "why" of educational media in the school program--the role of materials in new curriculum patterns, in new school administrative patterns, in new techniques and procedures in teaching, and in new patterns of staff utilization.

On-site visitors to 24 institutes (18 educational media and 6 librarianship) of the 49 institutes involved in the EMIE study rated the educational programs as follows:



RATINGS OF EDUCATIONAL PROGRAMS

When asked by on-site visitors to indicate the major strengths of institutes attended, students mentioned the following:

- Opportunities for close contacts with other professional persons and with outstanding consultants.
- Opportunities to learn important production techniques.
- Cooperation, interest, and rapport among staff and students; interest of staff members in helping participants to solve problems they face every day in their own school positions.

Recommendations of these same students concerning ways of improving future institutes focused on the following suggestions:

- Provide more practical experiences, more laboratory time, more time devoted to practical matters keyed to typical school situations.
- Program fewer topics in the institute, but study those to greater depth. Avoid "glossing over" course content.
- Avoid irrelevant topics with which participants are already quite familiar.

Some understanding of the value attached by participants to their own institute experiences may also be grasped by examining their answers to three items in an "institute experiences" questionnaire administered at the end of the Summer 1965 institute session, as follows:

QUESTION. In relation to your school assignment, do you feel the content and activities of the institute to be:

Ed. Media (N=1363)	Library (N=470)	
23%	20%	Of immediate benefit?
8	9	Introductory to long-range benefits?
65	68	A combination of the above two?
2	1	Not closely related but of limited benefit?
1	1	Of benefit vaguely in the future?
0	1	No response.

QUESTION. To what extent were the stated purposes and objectives of the institute program realized? (Check one)

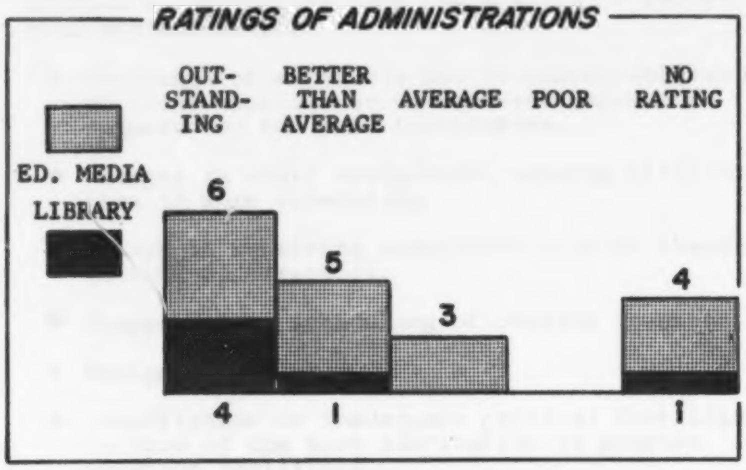
Ed. Media (N=1363)	Library (N=470)	
74%	81%	To a great degree
24	17	To a moderate degree
1	2	To a little degree
1	0	No response

QUESTION. What is your feeling about the total work load of the institute? (Check one)

Ed. Media (N=1363)	Library (N=470)	
22%	20%	Too heavy
74	77	About right
2	2	Too light
2	1	No response

Administration

Without exception, directors observed by EMIE visitors appeared to have one purpose in mind--to run effective and worthwhile institutes. While problems beyond their immediate control sometimes hampered full achievement of this goal (including problems arising from the lateness of institute awards for Summer 1965), it seemed quite clear that efforts expended in attempting to do so were well beyond usual expectations for ordinary summer college teaching. In several instances, it appeared that institute directors could have used additional released time from their regular duties so as to have more time during the spring in which to handle institute business. It seemed especially important to EMIE observers that directors devote as much time as possible to program planning, staff selection and orientation, advance publicity and dissemination of information about the institute, and selection of students. On-site visitors recommended that, on campuses having several summer institutes, some permanent central staff be used to relieve directors of administrative detail, thus permitting them to have the time they need for supervising the quality of their programs.



In the reports of on-site visitors, the following points were linked to successful administrative procedures:

- Care in initial planning, and especially in the clear spelling out of objectives in the institute announcement--not only in terms of scope and content, but also in terms of expected outcomes for participants--how they were expected to be changed by institute experiences. Qualifications for participants should also be clearly indicated in the brochure so as to insure a good "fit" between what individuals want and what the institute has to offer.
- A similar spelling out of objectives, purposes, intended emphases, and the like in nation-wide publicity issued by the U.S. Office of Education, along with clearly stated criteria to be used in judging qualifications of applicants.
- Close involvement of the institute director with the full range of affairs of the institute. His intimate knowledge of the sources of problems and of what needs to be done (often immediately) to solve or to ameliorate them cannot be overemphasized as to importance.
- An appropriate size of staff and enrollment. It was generally believed by EMIE observers that size of enrollment and size of staff should be closely related. Optimum size, aside from adequacy of staff and facilities, seems also to be related to theme or subject being studied. If the group is relatively homogeneous, and if the subject itself does not require individualization or the regular breaking down of the large group into several smaller sections, a larger enrollment could obviously be accommodated. Institutes in the range of 30 to 50 enrollees were regarded by on-site visitors as being the optimum size, although an enriched staffing and sufficiently large physical facilities and resource collections would no doubt permit the handling of considerably larger numbers. One Summer 1965 institute, for example, enrolled 94 participants and, from all reports, provided an excellent, well-organized program.
- Adequate orientation of participants and their families at the beginning of the institute session--including assistance with registration, housing, and "getting acquainted."
- Adequate advance information for participants. Students often remarked to on-site visitors (and indicated in their end-of-institute questionnaire rating sheet) that they would have liked to know about any special preparation they might have made in advance of the institute (reading, bringing supplies and equipment, and the like).

  Answers of participants to two questions in an end-of-institute information form provide further data concerning this aspect of program administration:

QUESTION. In view of the fact that a certain amount of common experience and knowledge is beneficial for the institute, would there be any benefit in having some material sent to the participants in advance of the institute? (Check one)

Ed. Media (N=1363)	Library (N=470)	
91%	91%	Yes
8	8	No
1	1	No response

QUESTION. If YES, check any items below which you feel would be valuable to have prior to the institute. (Check as many as apply)

Ed. Media	Library	
76%	76%	Course outlines
52	68	Bibliography
54	49	Duplicated materials concerning educational media equipment to be used
59	51	General institute educational program
10	12	Other (including list of things participants should bring, list of resource texts for institute courses, advance information concerning nature of required projects)

- Adequate communication among administration, staff, and participants. Items such as handbooks, weekly schedules, and newsletters were used and found helpful. Regular staff meetings helped staff members to coordinate and adjust programs, as necessary, and to expedite needed changes in procedures or services before problems became serious. Student committees sometimes served effectively in channeling student gripes and suggestions to the proper authority. In a few cases, one member of the professional staff served the very useful purpose of "suggestions chairman." Occasional group meetings of students and staff members were generally useful means of reducing tensions, clarifying purposes, and achieving participant cooperation.

- Well-planned logistics--a sufficiently large supply of materials and equipment in the right places at the right times. This usually required a flexibility of budget (highly recommended by EMIE observers) to provide extra resource assistance, supplies, and equipment as needs arose.
- Follow-up activities--letters to participants' superintendents and principals, issuance of certificates upon completion of the institute, and planned follow-up visits of participants by institute directors or staff members during the ensuing school year.

On-site visitors reported the following instances as detracting from the quality of institute administration:

- Shortages of materials due to unavailability of local supplies or unnecessary paper work required by the host institution.
- Changes in staff assignments causing difficulties in work scheduling.
- Delays in receiving subsistence checks (beyond control of director).
- Inappropriate scheduling of outside speakers.
- Equipment failures.
- Insufficient or inadequate physical facilities; failure of the host institution to provide promised facilities.

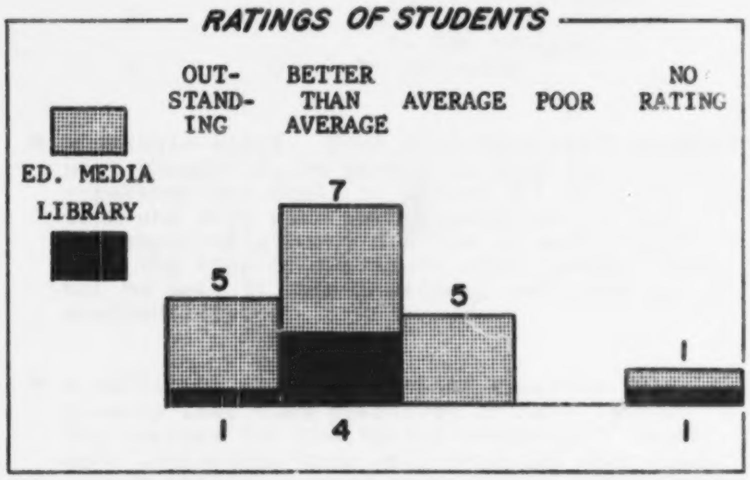
On-site observers reported generally that support of institute programs by institutional administrative authorities was fully adequate. They evidenced interest in the programs, were aware of their purposes and contributions to the professional improvement of those participating, and often adjusted their own way of "doing business" to accommodate the exigencies of schedule or other special needs of institutes on their campuses.

Students

On-site visitors were generally impressed with the quality of participants selected for institutes. They frequently characterized these students as "eager," "enthusiastic," "extremely interested in improving themselves professionally." There was some reason for caution, however, in the opinion of at least one observer, because with such eagerness students were likely to be "receptive to anything--even to poor instruction."

On-site visitors were not in full agreement as to the value of wide geographic representation among the student bodies of institutes. Generally speaking, however, institutes containing participants from many geographic areas seemed generally "more interesting" or "productive" (certainly "less colloquial") than those drawing students only from the immediate area. Benefits (the "lifting of sights") seemed to be gained through interactions of persons representing many different kinds of school situations in different parts of the country; too, there was less interference with problems of family and professional responsibilities by those some distance from their homes. On the other hand, follow-up activities with a widely scattered group would be more difficult to carry out than with a more localized group.

RATINGS OF STUDENTS



All on-site visitors were agreed that standards and procedures for selecting institute participants should be improved. In their appraisals of institute programs, they stressed the very crucial importance of a selection program that would assure a group appropriate to the level and purposes of the institute attended. Dissatisfaction with institute programs occurred most often when students felt their needs were not being met. Clear-cut statements in institute prospectuses or advertising brochures were regarded as essential in encouraging students to apply only to those institutes whose purposes related directly to their interests.

A tighter screening of applicants to avoid an excessive range in preparation, experience, and ability of participants was also regarded as an absolute essential for future institutes. In most cases, an excessively broad range of experience and background appeared to detract from over-all institute effectiveness; in a few others it did not. In most cases, efforts to adjust the institute program to accommodate the needs of such diverse groups were hazardous when they upset schedules or when materials were lacking to implement them. When individual attention could be given, however, such differences could be reconciled quite effectively. Theoretical emphases seemed to appeal to the broadest number of students; but a "straight" theoretical program could not possibly satisfy the needs of most institute participants--they demanded opportunities to apply what they had learned to practical problems of the kinds faced in day-to-day responsibilities in their own present professional assignments. On the other hand, students of diverse backgrounds in the so-called "special" institutes visited appeared to be capable of uniting quite satisfactorily through their interest in the specific kinds of subject matter or activities (programmed learning, feature films, programmed learning, television production, and the like).

Instruction

On-site observers expressed general approval of the level of instruction and quality of the staffs of the institutes visited. With few exceptions, sessions observed were reported to have been well-conducted and instructors were judged to be providing experiences that promoted student learning, interest, and morale. Specific points mentioned in the reports which contributed to the success of instruction were:

- A good balance between use of "local" and "visiting" staff. At one institute where the staff was composed totally of members of the local college faculty, the observer noted that a less parochial view of the educational media field should have been presented. At the other extreme, an institute staffed solely with visiting faculty was thought to need the addition of one or more local persons who could have helped to relate an otherwise excellent program to the needs of participants who are all "local."

- A well-rounded staff. A teaching staff that included theorist, researcher, and practitioner--each experienced in depth in his specialty--was regarded by observers as superior in many ways to one weighted heavily in other aspects--in "nuts and bolts" staff skills, for example. More persons having public school educational media administrative responsibilities were recommended for employment on institute staffs.

Student responses to one end-of-institute information question bear on this matter:

QUESTION. Generally, to what extent do you feel the institute instructors were aware of and conversant with problems with which public school teachers, supervisors, and librarians are faced? (Check one)

Ed. Media (N=1363)	Library (N=470)	
73%	88%	To a great degree
23	12	To a moderate degree
4	0	To a little degree
0	0	No response

- Careful selection and utilization of guest lecturers. "Outside" guest lecturers and consultants often did not appreciate the problems of elementary and secondary teachers, which is perhaps not surprising in view of the fact that whatever teaching experience they had at either or both of those levels was often obtained many years ago. Those who came from other states also had the disadvantage (not always a handicap) of knowing little about the somewhat unique school problems of areas represented among institute participants. Observers were unanimous in their opinion that guest lecturers should have been carefully briefed on desired emphases for their presentations and, at the same time, given information as to the nature of the presentations of other lecturers (and instructors) who preceded or were to follow them. Duplication of coverage, a common problem, thus could have been avoided. Observers also noted that having guest lecturers stay around long enough to allow participants to "pick their brains" and to obtain reactions to specific educational media problems produced greater satisfaction.

Student responses to an end-of-institute information item provide a further view of the effectiveness of visiting staff members:

QUESTION. Evaluate the contribution made by visiting specialists, taken together, who appeared at your institute. (Check one)

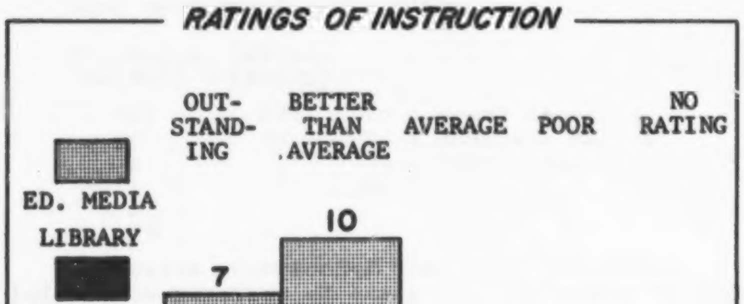
Ed. Media (N=1363)	Library (N=470)	
50%	70%	Contributed greatly to the organized program
44	29	Supplementary to the institute program
5	1	Only vaguely relevant to the program
1	0	No response

- Available staff. More full-time staff members were thought to be needed in many institutes --persons who could be around all day long to talk and work with participants out of class. The especially heavy demands of participants upon the time of institute staff members cannot be met, it seems, without such regular availability.

- A well-used staff. Students remarked frequently that they preferred to have senior instructors for the "prime teaching." Graduate assistants were well-accepted when their responsibilities were of a more supplementary (small-group, personal help) nature.

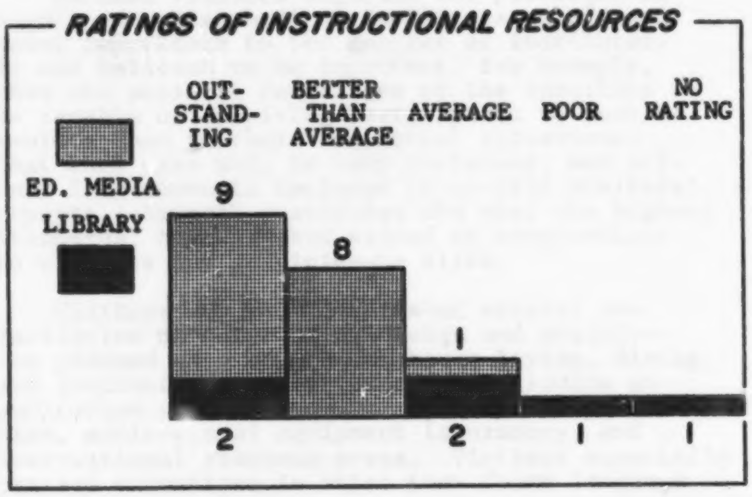
- A well-equipped staff. In a few instances, staffs were handicapped in the conduct of their teaching by lack of facilities or equipment needed to implement a truly modern instructional program.

- Greater attention to exemplary demonstrations, in day-to-day instruction, of the techniques and practices that are the primary concern of the institutes. Over-use of the lecture technique should be avoided, for example, just as the labored, unplanned, or careless use of poor visuals in an overhead projector should be. The highest standards of instruction should be adhered to at all times. "Bull sessions," appropriate under certain conditions, should not be mistaken for organized, planned instruction.



Instructional Resources

The instructional resources of educational media institutes were generally rated high by visiting observers. Supplies and materials seemed to be available in sufficient varieties and quantities to enable students to gain experience with new techniques to which they were being introduced. Observers were less enthusiastic about instructional resources available in librarianship institutes, however, where they tended to be less varied and weighted quite heavily toward those in the "print" medium.


RATINGS OF INSTRUCTIONAL RESOURCES

Criticisms of on-site visitors concerning instructional resources in both types of institutes were leveled chiefly at the inconvenience of access to them (due, primarily, to the fact that most often they were not located in the instructional area used by institute participants but, rather, in the library or audio-visual center some distance away). Participants themselves failed to cite this as any particular problem, however, as evidenced by their responses to this end-of-institute question:

■ QUESTION. Was the library in your institute easily accessible? (Check one)

Ed. Media (N=1363)	Library (N=470)	
92%	88%	Yes
7	12	No
1	0	No response

In commenting upon the generally high quality of available instructional resources in institutes observed, on-site visitors praised the following:

- Availability of teaching machines, with appropriate programs, in dormitories; used by students during off hours.
- Handout sheets developed by the institute staff and reproduced for distribution to participants at the time points, problems, or techniques were considered.
- Availability and distribution of various kinds of useful source information obtained through commercial producers and distributors.
- Use of helpful materials produced locally (as, for example, a series of 8mm cartridge films to help participants learn various graphics techniques).
- Placement of institute libraries in rooms adjacent to institute classrooms rather than the main library some distance across campus.
- Utilization, through field trips, of off-campus instructional resources (planetariums, museums, school instructional materials centers, production studios, and the like).
- Availability of facilities such as television studios staffed to assist participants in learning how to operate equipment.

Further information pointing to general student satisfaction with the quality and quantity of instructional resources available for their use at institutes may be obtained from their responses to four other items in an end-of-institute questionnaire, as follows:

■ QUESTION. Were the library and library services adequate for the needs of institute participants? (Check one)

Ed. Media (N=1363)	Library (N=470)	
38%	39%	Excellent
42	36	Good
15	18	Fair
4	6	Poor
1	0	No response

■ QUESTION. Was there available for use a variety of appropriate audio-visual equipment?

Ed. Media (N=1363)	Library (N=470)	
94%	90%	Yes
5	10	No
1	0	No response

■ QUESTION. To what extent did the instructional materials and activities used in the courses and workshops of your institute present new ideas and/or new approaches for you? (Check one)

Ed. Media (N=1363)	Library (N=470)	
74%	73%	To a great degree
25	24	To a moderate degree
1	3	Little or none
0	0	No response

■ QUESTION. To what degree did the materials in the library and the educational media resource center give you an opportunity to examine new materials for your school assignment next year? (Check one)

Ed. Media (N=1363)	Library (N=470)	
58%	62%	To a great degree
37	30	To a moderate degree
4	7	To a little degree
1	1	No response

Observers recommended that more institutes follow the practice of assigning one member of the staff (perhaps a qualified graduate assistant) to serve as the institute "materials coordinator" to assure that all needed resource items (especially those most recently available in the field) were on hand, as needed, and that they were loaned and returned under proper control. This individual would also be responsible for procuring loan materials from the campus audio-visual center or from off-campus sources.

It was also recommended that a comprehensive, up-to-date bibliography of useful new books, monographs, significant magazine articles, films, filmstrips, tape and disk recordings, chart sets, multi-media kits, videotapes, and the like (all related to the purposes of educational media and library institutes) be made available to directors and used in the future as a checklist against which to compare the adequacy of local instructional materials resources.

Physical Facilities

On-site visitors regarded the provision of highly adequate physical facilities as of paramount importance to the success of institutes. It was believed to be important, for example, that the physical facilities of the institute be capable of inspiring participants to seek to emulate them in their own school situations. That they were not, in many instances, was evident from comments included in on-site visitors' reports. Several institutes did meet the highest standards, however, and served as inspirations to visitors and participants alike.

Visitors reported details of several new facilities of outstanding design and utility--one planned as a complex to house living, dining, and instructional facilities and including an auditorium staff headquarters, graphics production, audio-visual equipment laboratory, and instructional resource areas. Visitors especially praised situations in which they found language laboratories, classrooms containing permanently installed audio-visual equipment, preview room facilities, production laboratories, recording studios, and other essential facilities located within or near the institute instructional area.

In a few cases, on-site visitors rated existing facilities as "not commensurate with the purposes and objectives of institutes concerned." These were characterized as "below standard," "not of such quality as to permit diffusion of acceptable concepts of the modern instructional communications program," or "lacking in the use of sophisticated equipment and techniques." As well as lack of equipment, it was also observed that poor ventilation, lack of air conditioning, poor light control, inadequate and poor use of space, and acoustical interference from nearby noisy activities combined rather frequently to detract from institute effectiveness. Physical facilities which, under ordinary circumstances, might have been rated as average or unsatisfactory were sometimes judged acceptable when classes were small and sufficient equipment was provided.

In several institutions it was noted that present unsatisfactory conditions will be improved considerably upon completion of new buildings now under construction. Firm commitments from campus administrators were recommended, in all future cases, to assure that satisfactory, allocated space will be available as needed. The lateness of contracts for Summer 1965 institutes led to some difficulties in this regard that may not be repeated in future years.

Student reactions to classroom facilities they encountered in Summer 1965 institutes are given in responses to the following end-of-institute item:

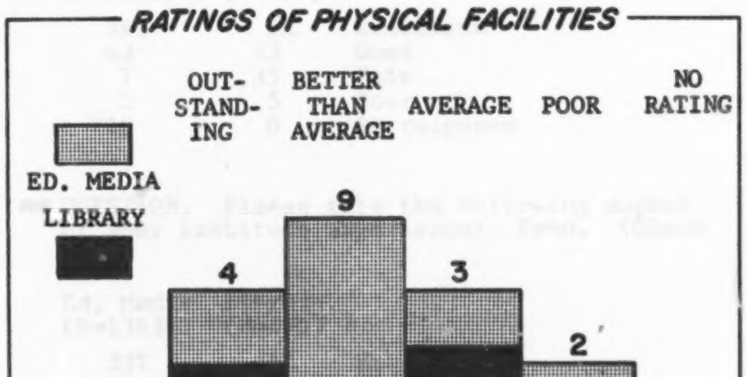
■ QUESTION. Please rate the following aspect of your institute experience: Classrooms. (Check one)

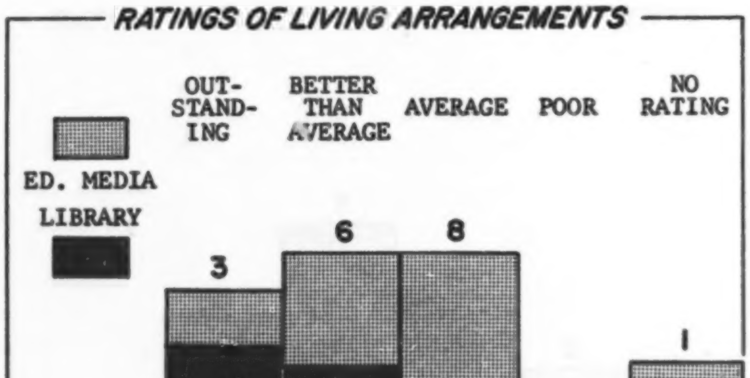
Ed. Media (N=1363)	Library (N=470)	
27%	31%	Excellent
44	37	Good
21	24	Fair
7	7	Poor
1	1	No response

Living Arrangements

Reactions of on-site visitors to observed living conditions were somewhat varied. In general, housing provisions appeared to be adequate, or "average"; in only one institute was there any real expression of dissatisfaction and this was directly attributable to the lack of air conditioning.

Housing arrangements for institute participants varied from no on-campus provisions at all (restricted to a relative few "commuter" institutes) to those in which all participants lived in on-campus dormitories. By far the most common situation encountered was that involving use of on-campus dormitory facilities. One on-site visitor expressed firm belief in the value of dormitory life in encouraging deeper involvement in and satisfaction with institute activities, chiefly because participants are temporarily freed from distractions of normal job and family responsibilities and given time to concentrate on the study and discussion of common problems with others who are interested and knowledgeable. Another visitor admitted that while there is something to be said in favor of "living together," too little concern is expressed for the special needs of the man who prefers to have his


RATINGS OF PHYSICAL FACILITIES


RATINGS OF LIVING ARRANGEMENTS

family with him. No visitor believed that institutions should be required to provide special housing for families, however, unless it is already readily available. All visitors agreed that, under ordinary circumstances, commuting to institute sessions should be discouraged.

Participant reactions to housing conditions in the institutes they attended may be noted in their responses to this end-of-institute item:

- QUESTION. Please rate the following aspect of your institute experience: Dormitory rooms. (Check one)

Ed. Media (N=1363)	Library (N=470)	
25%	28%	Excellent
28	36	Good
7	11	Fair
4	3	Poor
32	20	Does not apply (did not live in a dormitory)
4	2	No response

Dining Arrangements

Dining facilities provided by institutes included regular college dining halls in or near dormitories, lunch trucks, and student unions where snacks, tray, and informal dining services were available. On-site observers gave high ratings to these facilities and reported generally that good quality food was available at reasonable cost. No serious criticisms of food services were reported.

While at most institutes students relied principally upon regular dining facilities, at two visited by EMIE personnel special dining facilities were set aside for the exclusive use of participants. Regular coffee breaks (as "part of the service") were common and regarded by observers as contributing considerably to the general tone of friendliness and informality of sessions.

Responses of students to two end-of-institute items, however, showed somewhat less enthusiasm for either the dining rooms or food they encountered:

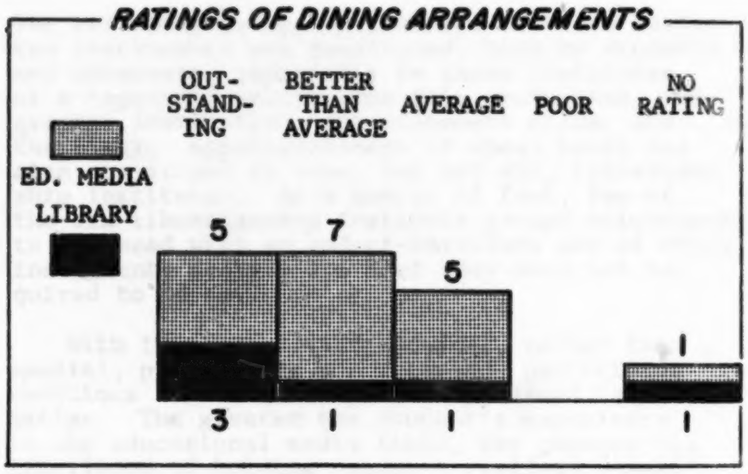
- QUESTION. Please rate the following aspect of your institute experience: Dining room. (Check one)

Ed. Media (N=1363)	Library (N=470)	
38%	5%	Excellent
43	55	Good
7	35	Fair
2	5	Poor
10	0	No response

- QUESTION. Please rate the following aspect of your institute experience: Food. (Check one)

Ed. Media (N=1363)	Library (N=470)	
33%	48%	Excellent
44	36	Good
11	10	Fair
2	1	Poor
10	5	No response

RATINGS OF DINING ARRANGEMENTS



Recreational Arrangements

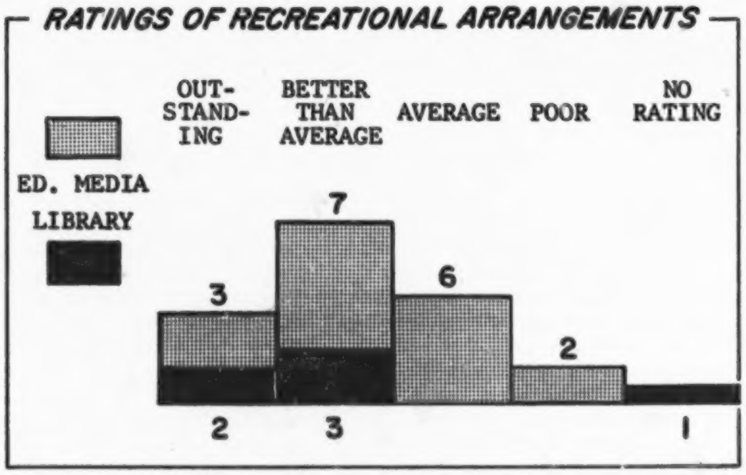
While an impressive variety of recreational opportunities existed at most institutes visited by EMIE observers, only a relative few were structured especially for institute participants. Instead, most were based primarily on the schedule of activities provided routinely for all summer session students.

In those institutions in which special recreation was planned for institute participants, the following activities were most frequently mentioned: dinners, picnics, recreational field trips, and special accommodations or reduced rates for films and theater performances.

EMIE observer reports reflected a divergence of philosophy, on the part of institute directors and others, concerning the advisability of structuring participants' free time. While none of the on-site visitors felt the schedule should be structured to the point that all activities were programmed, one observer did question the assumption of a number of directors that students preferred to be "on their own" and recommended that at least one activity be planned during an institute session at which all participants could be present. "Participants' feeling toward the director and toward fellow students," he said, "and therefore toward the whole institute, are very subtly but powerfully affected by the planned social program of the institute."

Observers agreed quite generally that recreational activities planned especially for the institute contributed importantly to participant morale. The earlier in the institute session that such events could be scheduled, the better.

RATINGS OF RECREATIONAL ARRANGEMENTS



Participant reactions to institute recreational programs may be noted in the following responses to the end-of-institute information form:

■■ QUESTION. Please rate the following aspect of your institute experience: Extra-curricular activities. (Check one)

Ed. Media (N=1363)	Library (N=470)	
26%	56%	Excellent
45	31	Good
19	8	Fair
7	4	Poor
3	1	No response

Reactions to EMIE Evaluations

EMIE observers were asked to note student reactions to instruments and procedures used in the project evaluation program. Considerable divergence of opinion was expressed with regard to the three paper-and-pencil items--the personal information-interests-proficiencies form, the information test, and the attitudes scale. In general, little negative criticism was voiced concerning the personal information-interests-proficiencies form; the information test and attitudes scale aroused considerably more comment. The relevancy or appropriateness of these latter two instruments was questioned, both by students and observers, especially in those institutes of a "special" nature (8mm film production, programmed instruction, entertainment films, and the like). Appropriateness of these tests was also questioned in some, but not all, librarianship institutes. As a matter of fact, two of the six librarianship institute groups volunteered to go ahead with an end-of-institute use of these instruments despite the fact they were not required to do so.

With institutes where general, rather than special, preparation was stressed, participant reactions to the tests generally seemed to be better. The greater the student's experience in the educational media field, the greater his likelihood of holding negative feelings toward tests used in this study and to regard them as "too traditional." Relatively inexperienced participants, on the other hand, were more likely to complain that the tests showed up too many gaps in their knowledge of the educational media field.

Participants and institute staff alike seemed to regard quite favorably the presence of EMIE observers on their campuses and to feel that such evaluation activities ought to lead to better institutes in the future.

Chapter 5

CHANGES IN STUDENTS

Chapter 5 presents results of several studies made for purposes of gathering data pertaining to measurements of various short-term changes in Summer 1965 participants in educational media specialist and school librarianship institutes.

The first discussion (in Part A, "The Interest Inventories," following) centers on pre- and post-institute uses of two sections of an interest inventory that also provided respondents with the opportunity to indicate, for separate items, their estimated pre- and post-institute level of competence.

The second discussion (in Part B, "Educational Media Information Test") describes the development and analysis of results of using the McLAUGHLIN INSTRUCTIONAL COMMUNICATIONS EXAMINATION (MICE) in selected educational media and school librarianship institutes during Summer 1965. This project was conducted and interpreted by Mr. Richard C. McLaughlin, Syracuse University, under a special contract with the EMIE Project.

The third, and final, portion of this chapter, headed "Measurement of Attitude Change Toward Newer Educational Media of Participants of Selected Media Institutes and School Library Personnel Institutes," includes a description of the development and analysis of an instrument (CONTROVERSY IN ACADEMICIA) designed to measure pre- and post-institute attitudes of participants toward a variety of "new media" matters. This particular study was conducted and interpreted by Dr. Curtis Ramsey, George Peabody College for Teachers, under a special contract with the EMIE Project.

A THE INTEREST INVENTORIES

The "interest inventories" employed in this part of the EMIE study were intended to be specifically relevant for individuals taking a first sequence of courses in the educational media field. They were in two parts: (1) a PERSONAL INFORMATION REPORT FORM: SECTION II, INTEREST INVENTORY (BROAD GOALS)--containing twelve general goals considered to be relevant to the field, and (2) a PERSONAL INFORMATION REPORT FORM: SECTION III, INTEREST INVENTORY (SPECIFIC GOALS)--containing a total of 73 "specific activity" items organized into four general areas further grouped into a series of internally related clusters.

Both inventories were considered to be quite easy to take. In the initial administration of SECTION II, for example, the student was asked only to consider each broad goal listed and to enter two checks--one indicating its importance to him, personally, and the other an estimate of his present competence with respect to that goal. The second administration (post-institute) used identical items and requested a second estimate by the student of his present competence with respect to each goal as well as his rating of the importance of each goal in his anticipated 1965-66 school assignment. In the initial administration of SECTION III, the student was asked to estimate his current level of knowledge or skill for each specific activity and to indicate his interest in improving his performance with respect to it. In the post-institute administration for this section, the student was again asked to estimate his current level of knowledge or skill for each of these same specific activities and to estimate the adequacy with which each such activity was covered in the institute attended.

The interest inventories used in this part of the EMIE study had the further advantage of permitting students to consider rapidly a wide range of broad goals and specific activities and to be reminded, in the process, of some which they might not have regarded previously as being important functions of the educational media field.

Both inventories were relatively easy to interpret. Areas and clusters most heavily marked by students could be noted; a student could be readily identified, for example, who assessed himself as having little or no skill but high interest in improving his performance or knowledge in any particular area. Additionally, the basic source material (the actual responses of students) was readily available for later use in instructor-student conferences.

Development of the Inventories

Development of the two sections of the interest inventory was influenced by the need to emphasize a broad spectrum of "educational media" activities (broader, of course, than would be applicable to any one student in the study). The two-column arrangement calling for the respondent's assessment of "importance" and "present level of competence" was based on a modified format devised by Roe (1956). Goals and activities included in the inventories were those that were: (1) potentially applicable to professional activities of workers in the field of educational media, and (2) actually included in statements of objectives for one or more NDEA educational media or librarianship institutes for Summer 1965. An earlier description of the development of instruments used with the EMIE Project (see Chapter 1) gives additional information concerning how these statements were tried out and revised before being used with institute participants. Among other things, they were administered experimentally to 76 graduate students completing a basic course in audio-visual instruction at California State College (Hayward). Data resulting from this trial permitted an estimate of adequacy of coverage, an evaluation of the feasibility of item groupings, and a practical estimate of the validity and reliability of the inventories. Further checks with all 36 educational media institute directors, EMIE Advisory Board members, and other individuals known to be expert in the field provided further suggestions for revision and improvement.

Administration

Both sections of the INTEREST INVENTORY were developed to be self-administering. All necessary directions were given on an accompanying cover page. Thus, participants were able to complete their responses in either individual or group sessions. All students were asked to use whatever time was required to complete all items in each inventory. The typical time required for this process was about 40 minutes.

Inventories were administered during the first week--and again during the last week--of the 36 educational media institutes and the 13 librarianship institutes that stressed the concept of the school library as an "instructional materials center."

Every participant completed the first administration; participants in all but one institute also completed and returned the post-institute version.

Broad Goals (Educational Media): Pre- and Post-Institute Administrations

A total of 1363 students enrolled in 36 educational media institutes completed the PERSONAL INFORMATION REPORT FORM: SECTION II, INTEREST INVENTORY (BROAD GOALS) during their first week of the Summer 1965 institutes. At this pre-institute session, students indicated how important each broad goal was to them, personally, and estimated their present competence with respect to it. During the last week of the institute programs, 1289 participants in 35 of these same institutes completed a second version of SECTION II which listed identical broad goals. At this post-institute session, participants again estimated their competence with respect to each goal, but this time they also rated its importance in their anticipated 1965-66 school assignments.[1] Each of these broad goals is listed in Table 5-1, along with the "high"

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[1] The importance of the goals in participants' anticipated school assignments will be discussed for both educational media and librarianship institute participants in the next section.

TABLE 5-1. BROAD GOALS (EDUCATIONAL MEDIA): PRE-INSTITUTE AND POST-INSTITUTE COMPETENCE RATINGS

Pre-Institute									Broad Goals	Post-Institute					
% Rating "High Importance"			% Rating Competence as:							% Rating Competence as:					
			"Minimal"			"None or Almost None"				"Expert"			"Passable"		
Code 1	2	3	Code 1	2	3	Code 1	2	3		Code 1	2	3	Code 1	2	3
98	95	90	13	21	38	2	2	8	1. Developing effective ways of influencing teachers to make improved and increased uses of educational media in the school in which you work	20	27	21	72	68	73
73	75	71	52	44	51	3	11	18	2. Learning more about significant theoretical aspects and roles of new media in educational communication	8	11	11	70	78	74
62	78	71	33	39	50	7	10	21	3. Establishing standards and procedures for the critical evaluation and selection of educational media by teachers, subject matter specialists, supervisors, and others	25	22	17	62	70	69
55	69	68	32	32	41	7	12	24	4. Establishing similar standards and procedures with regard to the selection of technological devices (projectors, teaching machines, language laboratory installations, etc.)	27	27	17	57	63	67
75	75	80	22	25	39	3	9	24	5. Improving your skills required for the local production of simple instructional materials (large transparencies, charts, 2x2 slides, mounted materials, and the like)	35	41	30	57	54	61
32	43	63	32	30	31	5	10	19	6. Improving skills required for necessary simple maintenance of technological equipment (projectors, playbacks, and the like)	28	26	23	43	51	58
52	56	41	43	32	24	23	38	64	7. Improving your skills required for the local production of more complex educational media (8mm or 16mm motion pictures, television programs; and the like)	5	10	4	52	64	37
57	69	65	38	38	45	10	17	33	8. Becoming better acquainted with the characteristics, special advantages, uses, costs, and operating techniques required for various technological devices for educational media (copiers, recorders, self-study devices, etc.)	8	19	12	73	67	68
85	83	77	27	39	42	7	14	34	9. Becoming better acquainted with recommended administrative patterns and procedures for educational media programs; improving ability to organize and administer such programs	15	23	16	78	67	68
55	68	71	32	32	43	3	6	15	10. Becoming better acquainted with the availability, content, and use of source lists, catalogs, and evaluative listings pertaining to educational media	30	34	27	58	57	64
77	70	62	43	43	42	15	21	39	11. Learning more about standards and recent improvements in the planning of educational facilities (buildings, classroom studios, etc.) to permit adequate use of educational media	5	15	11	78	70	65
75	75	65	42	33	41	17	26	40	12. Improving your "grasp" of factors, standards, and criteria involved in the process of preparing, defending, and expending of budgets for new educational media and services	8	18	11	80	67	64

importance and "minimal" and "none or almost none" competence responses of Code 1, 2, and 3 participants resulting from the pre-institute administration of this form. Post-institute estimates of competence at "expert" and "passable" levels are shown at the right in the same table.[1]

Broadly speaking, educational media specialist institute participants rated the broad goals (included in Table 5-1) as being of high importance. Yet, with only a few exceptions, rating of their pre-institute competence with respect to these same goals was relatively low. An average of 69% of all educational media institute participants rated importance of goals as "high" while, at the same time, 63% of them rated their competence with regard to these goals as being "minimal" or "none or almost none."

Prior to the institutes, educational media specialist institute participants, taken together, considered Goal 7 as being of least importance; they also considered themselves unprepared to perform it (see Table 5-1). On the other hand, these same participants rated Goal 1 as being of greatest importance and estimated they were already relatively competent to perform or attain it. Goals 9, 11, and 12 were considered by students to be highly important, yet they regarded themselves as being unprepared to attain or perform them. As judged from pre-institute ratings, participants evidently wanted additional knowledge and skill regarding these three areas of media administration: organization, facility planning, and budgeting.

Taken as a whole, Code 3 participants in educational media institutes gave higher "importance" ratings to the broad goals than did either the Code 1 or Code 2 participants. Code 1 participants gave highest ratings to Goals 1, 9, 11, and 12--all dealing with "administrative" matters; Code 3 participants, on the other hand, gave highest ratings to Goals 5 and 6, which may be regarded as "technical." As might have been expected, Code 1 participants appeared to rate themselves as being more competent, prior to the institutes, than either Code 2 or Code 3 participants--with respect to all goals taken together. Following the institutes, however, a higher percentage of Code 2 than either Code 1 or Code 3 participants estimated their competence to be better than minimal.

Comparisons of pre-institute and post-institute competence ratings of media specialist participants indicated that, during the total institute period, the level of competence of all three code groups improved with respect to each broad goal. Considering all twelve goals together, prior to the institutes, an average of only 57% of Code 1, 50% of Code 2, and 31% of Code 3 participants had regarded their level of competence as better than minimal. In contrast, following the institutes, an average of 83% of Code 1, 87% of Code 2, and 74% of Code 3 participants rated their level of competence as better than minimal. However, goals rated as of "low importance" at the time of the pre-institute administration of the form showed the least amount of net gain at the end. Items having pre-institute ratings of "high importance-low skill" showed greatest gains at the end. Items having pre-institute ratings of "high importance-high skill" (Goal 1, for example) retained and, to some, extent, improved their high competence ratings at the end.

A few other examples may serve to illustrate the significance of data in Table 5-1. Goal 7 (initially described as a "low importance-low skill" item) showed only a modest gain in competence at the end. On the other hand, Goal 12 (a pre-institute item of "high importance-low skill") showed a marked increase in competence. Prior to the institutes, 59% of Code 1, 59% of Code 2, and 81% of Code 3 participants estimated their competence to be only minimal with respect to Goal 12. Following the institutes, 88% of Code 1, 85% of Code 2, and 75% of Code 3 participants estimated their competence with respect to this goal to be better than minimal--a net gain of 47%, 44%, and 56% respectively.

Broad Goals (Librarians): Pre- and Post-Institute Administrations

A total of 470 students enrolled in 13 school library personnel institutes also completed the PERSONAL INFORMATION REPORT FORM: SECTION II, INTEREST INVENTORY (BROAD GOALS) during their first institute week. As with the educational media groups, students indicated how important each broad goal was to them, personally, and estimated their present competence with respect to it. During the last week of the institutes, 464 of these same individuals completed a second version of SECTION II containing identical statements of broad goals. At this session, students estimated their present competence with respect to each goal and rated its importance to them in their anticipated school assignment for 1965-66. Each broad goal is stated in Table 5-2, along with pre-institute "high" importance and "minimal" and "none or almost none" competence responses of Code 1, 2, and 3 participants. Post-institute estimates of competence at "expert" and "passable" levels are shown at the right in the same table.

Prior to the institutes, librarianship participants (Codes 1, 2, and 3) rated the broad goals, with only a few exceptions, as being quite important. But, perhaps as might have been expected from the "library" orientation of their previous professional training, they tended to consider themselves to be unprepared to attain or perform them. On an over-all basis, an average of 62% of all librarianship participants rated the importance of the goals as "high"; 66% rated their pre-institute competence with respect to those goals as "minimal" or "none or almost none."

Code 3 participants in librarianship institutes regarded the broad goals, as a whole, as being of more importance than did either Code 1 or Code 2 participants. Of the three code groups, those in Code 2 considered themselves to be most competent with respect to those goals both before and after the institute experience.

Prior to the institutes, enrollees in library institutes considered Goal 7 (see Table 5-2) as

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[1] While all response categories ("high," "some," and "little or none" for importance; "expert," "passable," "minimal," and "none or almost none" for competence) might have been shown in Table 5-1, the majority of responses fell into the pre- and post-institute categories cited above.

TABLE 5-2. BROAD GOALS (LIBRARIANS): PRE-INSTITUTE AND POST-INSTITUTE COMPETENCE RATINGS

Pre-Institute									Broad Goals	Post-Institute					
% Rating "High Importance"			% Rating Competence as:							% Rating Competence as:					
			"Minimal"			"None or Almost None"				"Expert"			"Passable"		
Code 1	Code 2	Code 3	Code 1	Code 2	Code 3	Code 1	Code 2	Code 3		Code 1	Code 2	Code 3	Code 1	Code 2	Code 3
97	85	90	31	19	33	5	6	7	1. Developing effective ways of influencing teachers to make improved and increased uses of educational media in the school in which you work	16	22	7	71	75	76
77	71	83	44	36	67	26	22	13	2. Learning more about significant theoretical aspects and roles of new media in educational communication	12	11	7	65	85	70
73	64	53	30	36	33	20	20	50	3. Establishing standards and procedures for the critical evaluation and selection of educational media by teachers, subject matter specialists, supervisors, and others	19	30	0	56	67	83
45	45	53	39	39	40	47	40	57	4. Establishing similar standards and procedures with regard to the selection of technological devices (projectors, teaching machines, language laboratory installations, etc.)	8	11	3	50	55	53
58	67	83	36	30	23	45	32	50	5. Improving your skills required for the local production of simple instructional materials (large transparencies, charts, 2x2 slides, mounted materials, and the like)	10	11	13	62	62	63
37	51	63	26	29	40	52	35	43	6. Improving skills required for necessary simple maintenance of technological equipment (projectors, playbacks, and the like)	8	8	3	43	47	30
18	24	17	15	12	13	79	74	80	7. Improving your skills required for the local production of more complex educational media (8mm or 16mm motion pictures, television programs, and the like)	2	1	3	15	18	17
52	47	70	34	29	37	59	51	50	8. Becoming better acquainted with the characteristics, special advantages, uses, costs, and operating techniques required for various technological devices for educational media (copiers, recorders, self-study devices, etc.)	5	9	3	47	48	23
72	54	67	43	30	30	31	40	53	9. Becoming better acquainted with recommended administrative patterns and procedures for educational media programs; improving ability to organize and administer such programs	8	16	3	53	67	50
80	80	93	26	28	40	13	10	23	10. Becoming better acquainted with the availability, content, and use of source lists, catalogs, and evaluative listings pertaining to educational media	22	42	7	60	54	83
61	53	80	45	33	50	24	36	33	11. Learning more about standards and recent improvements in the planning of educational facilities (buildings, classroom studios, etc.) to permit adequate use of educational media	10	13	7	49	65	60
71	57	80	37	35	43	30	30	43	12. Improving your "grasp" of factors, standards, and criteria involved in the process of preparing, defending, and expending of budgets for new educational media and services	13	20	7	49	57	57

being least important; they also regarded themselves as lacking competence to perform or attain it. On the other hand, Goals 5, 8, 9 and 12 were rated as being highly important, although enrollees also considered themselves unprepared to perform or attain them. Librarianship institute participants apparently felt need for additional skill and knowledge in areas associated with the production of simple instructional materials, the operation and use of various technological devices for educational media, administration of media programs, and preparation of educational media budgets. As in the case of the educational media specialists, librarianship institute enrollees rated Goal 1 as being of greatest importance and, at the same time, they judged themselves to be relatively competent to perform or attain it.

Comparisons of pre- and post-institute competence ratings of librarianship participants indicated that, during the institute session, estimated competence improved with respect to each broad goal for each of the three code groups. Prior to the institutes, for all goals taken together, an average of only 29% of Code 1, 36% of Code 2, and 20% of Code 3 participants had rated their level of competence as better than minimal. Following the institutes, however, an average of 63% of Code 1, 74% of Code 2, and 61% of Code 3 librarianship participants rated their competence as better than minimal.

Goal 7, which at the time of the pre-institute administration of the INTEREST INVENTORY was rated as a "low importance-low skill" item, showed the least net gain. Goals 2, 4, 5 and 11 showed uniformly high gains in competence for all three code groups. Quite commonly, one code group often showed a high gain in competence for a particular goal while the other two did not, and vice versa. With regard to Goal 3, for example, 50% of Code 1 and 80% of Code 3 participants rated their pre-institute competence as "minimal" or "none or almost none"; following the institute, 77% of Code 1 and 83% of Code 3 participants estimated their competence as being better than minimal (net gains of 25% and 66%, respectively).

Further analysis of pre- and post-institute responses showed a high positive correlation (rho=.97) between the post-institute ratings of the importance of goals in 1965-66 school assignments and the pre-institute ratings of the importance of these same goals to the participants themselves.[1] That is, media specialist and librarianship participants alike believed that goals of most importance to themselves were likely to be those of most importance in their later school assignments.

Prior to the institutes, both participant groups rated as important goals which they were already fairly capable of achieving or performing. There was a high correlation (rho=.89), for example, between all librarianship participants' ratings of the importance of goals and their estimated competence with respect to them. The correlation for educational media specialist institute participants was .47.

There was a high correlation (rho=.90) between pre-institute ratings of the personal importance and post-institute competence ratings of these same goals. This fact suggests that participants, taken as a whole, pursued and, hence, became more competent in the skills and knowledge associated with goals which they considered initially to be most important.

Perhaps the most significant feature of the responses of educational media and librarianship institute participants with respect to the broad goals just discussed is that both groups assessed their pre-institute competence as very low. This suggests that, to begin with, participants in both types of institute were relatively unsophisticated with regard to educational media activities described by statements in the inventory form.

Specific Goals (Educational Media): First Administration

A total of 1363 students enrolled in 36 educational media specialist institutes were asked, prior to the beginning of the session, to indicate their present level of skill or knowledge and their interest in improving their level of performance with respect to each of a number of specific activities enumerated in the PERSONAL INFORMATION REPORT FORM: SECTION III, INTEREST INVENTORY (SPECIFIC GOALS). Table 5-3 contains a list of such specific activities, in four categories (production, analyzing and appraising, teaching, and administration) that, because of their "high interest" and "low skill or knowledge" ratings, have special relevance to this discussion. Because of space limitations, "low interest-low skill" and "low interest-moderate or high skill" items are not discussed here. Items were included in Table 5-3 only if more than 30% of the respondents in a particular code group rated them as being of "very high interest." Further denotations of these "high interest" items were made, as follows:

*A single asterisk denotes an activity which students in any code group, taken together, considered interesting and which they judged themselves to be unprepared to perform or attain. This listing was restricted to items for which at least 50% of the respondents in any code group rated their skill or knowledge as "none or almost none."

**A double asterisk denotes an activity which students in any code group, taken together, considered highly interesting and which they judged themselves to be only somewhat prepared to perform or attain. This listing was restricted to items for which at least 30% of the respondents in any code group rated their skill or knowledge as "none or almost none."

A number of activities originally included in List A ("production") did not survive the process of item selection outlined above, as follows: (a) using lettering devices and aids, (b) designing displays and bulletin boards, (c) using the chalkboard, (d) doing simple sketching, (e) making charts, (f) making graphs and timelines, (g) preparing flannel board materials, (h) mounting flat pictures, (i) preparing magnetic board materials, (j) spirit duplicating, (k) mimeographing, (l) preparing copy for offset printing, (m) making dioramas, (n) making puppets and puppet theaters, (o) building and stocking terraria, (p) building and stocking aquaria, (q) taking still pictures,

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[1] Spearman's Rank-Difference Correlation (rho).

TABLE 5-3

SPECIFIC GOALS (EDUCATIONAL MEDIA): FIRST ADMINISTRATION

"Skill--None or Almost None" Responses in Percentages			Activity	"Interest--Very High" Responses in Percentages		
Code				Code		
1	2	3		1	2	3
			LIST A. "PRODUCTION" ACTIVITIES			
7	19	39**	Making large transparencies	45	56	62**
18	45**	70*	Doing close-up copying with camera	48	50**	43*
22	29	51*	Taking motion pictures	53	59	48*
50*	54*	76*	Synchronizing sound with slide sets	43*	43*	38*
67*	70*	87*	Adding sound to magnetic-striped film	33*	39*	30*
28	49	71*	Doing darkroom work	48	42	39*
55*	56*	79*	Producing television programs	40*	43*	30*
40	44	70*	Editing film footage	43	46	37*
20	36	59*	Editing slide sets	50	41	39*
52	58	72*	Mounting objects in plastic	27	28	35*
16	34	59*	Making handmade slides	23	29	39*
			LIST B. "ANALYZING AND APPRAISING" ACTIVITIES			
33**	31	46	Getting acquainted with and evaluating programmed materials	50**	38	46
			LIST C. "TEACHING WITH MATERIALS" ACTIVITIES			
45**	38**	57*	Teaching with programmed materials	58**	59**	47*
40**	33**	52**	Teaching with television programs	55**	57**	50**
			LIST D. "ADMINISTRATIVE" ACTIVITIES			
15	28	52**	Developing administrative procedures for new media centers	77	75	61**
17	37**	61**	Designing facilities for new media centers	77	73**	56**
53**	57**	75**	Designing or conducting "action research" studies related to new educational media	55**	54**	35*
55*	50**	68*	Administering programmed instruction	43*	56**	42*
20	32	52**	Developing specifications for new media equipment purchases	63	67	58**
23	29	43**	Using AV materials in evaluating student performance	48	56	50**
50*	60*	65*	Selecting teaching machines	42*	48*	39*
50*	53*	74	Developing specifications for language laboratories	40*	37*	28

(r) writing scripts, (s) making tape recordings, (t) constructing learning devices, (u) building models, (v) organizing group dynamics, (w) dramatizing, (x) producing radio programs, and (y) operating audio-visual equipment.

Similarly, a number of List B activities, each involving "getting acquainted with and evaluating . . . ," were not included: (a) films, (b) filmstrips, (c) recordings, (d) flat picture resources, (e) maps and globes, (f) textbooks, (g) reference books, (h) free materials, (i) supplementary books, (j) field trips, and (k) demonstrations.

Items omitted from List C involved "teaching with . . .": (a) films, (b) filmstrips, (c) recordings, (d) flat pictures, (e) slides, (f) large transparencies, and (g) radio programs.

Finally, items omitted from List D, all relating to "administrative" matters, included: (a) locating information about educational media, (b) cataloging educational media, and (c) inspecting and maintaining educational media.

Specific Goals (Librarians): First Administration

A total of 470 students enrolled in 13 school library institutes were also asked, prior to the beginning of the institute sessions, to rate their present level of knowledge or skill and their interest in improving their level of performance with respect to all the items included in the PERSONAL INFORMATION REPORT FORM: SECTION III, INTEREST INVENTORY (SPECIFIC GOALS), as described for the educational media specialist groups in the preceding section. Table 5-4 shows the results obtained. Again, items are included because of their "high interest-low skill or knowledge" ratings. Single and double asterisks are used, as before, to indicate items of varying degrees of interest and skill or knowledge.

It is interesting to note, in comparing responses of the librarians with those of the educational media participants:

- Both groups were similarly interested in and evidently in need of further instruction in the administration of educational media services. (Of the eleven items in the full list of objectives under this heading, each group cited eight which met the "high interest-low skill or knowledge" criterion. In each case, seven were identical.)
- Librarians showed interest in considerably fewer production activities than did the educational media specialist groups.

Specific Goals (Media Specialists and Librarians): Pre- and Post-Institute Comparisons of Competence

A total of 1363 students enrolled in 36 educational media specialist institutes and 470 students enrolled in 13 school library personnel institutes were asked, at the beginning of the institute session, to indicate their present level of skill or knowledge with respect to each of a number of specific educational media activities listed in SECTION III of the PERSONAL INFORMATION REPORT FORM. Following the institutes, 1289 of the same educational media institute participants and 464 of the same librarianship institute participants were asked again to estimate their

TABLE 5-4

SPECIFIC GOALS (LIBRARIANS):
FIRST ADMINISTRATION

"Skill--None or Almost None" Responses in Percentages			Activity	"Interest--Very High" Responses in Percentages		
Code 1	Code 2	Code 3		Code 1	Code 2	Code 3
			LIST A. "PRODUCTION" ACTIVITIES			
62*	59*	73**	Making large transparencies	41*	43*	53*
70	68	67*	Making handmade slides	26	28	43*
			LIST B. "ANALYZING AND APPRAISING" ACTIVITIES			
30**	19	40	Getting acquainted with and evaluating flat picture resources	65**	56	47
35**	31	30	Getting acquainted with and evaluating recordings	55**	46	47
30**	22	37	Getting acquainted with and evaluating films	51**	49	43
			LIST C. "TEACHING WITH MATERIALS" ACTIVITIES			
41**	39**	57**	Teaching with large transparencies	58**	57**	60**
63*	60*	37	Teaching with programmed materials	45*	44*	40
59*	49	50*	Teaching with television programs	44*	36	40*
53*	54*	73	Teaching with radio programs	37*	33*	27
			LIST D. "ADMINISTRATIVE" ACTIVITIES			
50**	57*	77**	Designing facilities for new media centers	58**	42*	60**
47**	50*	70**	Developing administrative procedures for new media centers	71**	42*	60**
63*	60*	73**	Developing specifications for new media equipment purchases	47*	37*	57**
19	13	43**	Cataloging educational media	74	66	77**
66*	46*	73*	Using AV materials in evaluating student performance	41*	41*	33*
75	72*	63*	Administering programmed instruction	26	34*	37*
77*	64*	90	Selecting teaching machines	34*	34*	27
79*	79	80*	Designing and conducting "action research" studies related to new educational media	32*	25	43*

present level of skill or knowledge with respect to these same activities. Table 5-5 contains a list of items that, because of their fairly high post-institute skill or knowledge ratings, seem to have special relevance to this discussion. Items were included in Table 5-5 only if: (1) 50% or more of the participants in any one code group estimated their post-institute skill and knowledge to be either "expert" or "passable," or (2) a 30% net gain was shown by any one particular code group's pre- and post-institute ratings in the "expert" or "passable" categories combined. (Percentages for items in this second category are underlined in Table 5-5.)[1]

Only eight of the original specific activities failed to show sufficient gains in competence to be included in Table 5-5. These items were: (1) List A--doing simple sketching, making dioramas, making puppets and puppet theaters, building and stocking terraria, building and stocking aquaria, adding sound to magnetic-striped films, producing radio programs; and (2) List D--developing specifications for language laboratories.

The total percentages of pre-institute "expert" and "passable" skill and knowledge ratings for Code 1, 2, and 3 participants in educational media institutes and in librarianship institutes are shown at the left in Table 5-5. Comparable post-institute ratings for the same groups are shown at the right in the same table. Thus, for example, 58% of the Code 2 educational media institute participants rated their pre-institute knowledge and skill as either "expert" or "passable" with regard to "using lettering devices and aids." Following the institutes, however, 88% of the participants in this group rated their competence with respect to this activity as either "expert" or "passable."

With very few exceptions, both librarianship and educational media institute participants estimated that, during the institute session, their skill and knowledge had increased for each of the 68 specific activities, regardless of how well participants reported each activity was covered.[2] Broadly speaking, however, a greater increase in skill and knowledge was shown for those activities reported by participants as being: (1) well covered in the summer programs, and (2) highly interesting to themselves. Perhaps a partial explanation for growth in skill and knowledge related to activities reported as not having been covered in institute programs is that participants acquired, through use of textbooks and supplementary materials or through non-class activities and associations, at least some knowledge or skill with respect to all activities listed.

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[1] The original list of activities included a total of 73 items. Four of them, however (one each from Lists A, B, C, and D) were "free response" items, included so that participants might indicate other relevant activities in which they were interested. One other item, found to duplicate another in the list, was eliminated.

[2] Code 1 media institute participant ratings showed slight decreases in estimated competence for two specific activities; Code 3 librarianship institute participant ratings showed slight decreases in estimated competence for five specific activities.

TABLE 5-5. SPECIFIC GOALS (EDUCATIONAL MEDIA AND LIBRARIANS): PRE- AND POST-INSTITUTE COMPETENCE RATINGS

Pre-Institute % Rating Knowledge and Skill as "Expert" and "Passable"						Specific Goals	Post-Institute % Rating Knowledge and Skill as "Expert" and "Passable"					
Ed Media Code			Librarians Code				Ed Media Code			Librarians Code		
1	2	3	1	2	3		1	2	3	1	2	3
						LIST A. "PRODUCTION" ACTIVITIES						
63	58	43	52	78	53	Using lettering devices and aids	86	88	89	70	83	70
80	88	76	50	57	33	Using the chalkboard	88	90	98	88	75	84
68	64	54	75	85	63	Designing displays and bulletin boards	82	86	87	85	93	77
			54	58	70	Making charts				79	72	63
70	64	48	42	37	53	Making graphs and timelines	79	79	74	70	51	60
59	47	32	20	40	50	Preparing flannel board materials	84	74	74	53	59	53
95	66	47	47	68	60	Mounting flat pictures	92	90	89	70	78	63
52	34	18	11	21	20	Preparing magnetic board material	47	69	53	42	23	23
85	79	74	43	63	70	Spirit duplicating	92	91	91	69	76	80
60	69	56	46	71	60	Mimeographing	76	76	72	62	73	67
25	26	11				Preparing copy for offset printing	54	43	23	17	16	13
42	41	14				Making handmade slides	52	64	48			
67	60	32	13	20	3	Making large transparencies	93	90	80	69	63	87
12	15	8				Mounting objects in plastic	30	36	44			
78	63	47	43	46	53	Taking still pictures	92	85	76	58	47	47
45	37	22				Taking motion pictures	54	71	39			
12	25	10				Editing film footage	39	62	28			
40	37	16	17	7	3	Editing slide sets	75	77	55	31	14	40
29	33	15	27	22	44	Writing scripts	60	66	56	29	29	50
76	69	51	41	36	50	Making tape recordings	88	89	85	61	57	70
36	29	10				Doing close-up copying with camera	77	67	50			
34	24	12				Doing darkroom work	59	46	39			
21	30	20				Constructing learning devices	48	64	54			
25	20	7				Synchronizing sound with slide sets	52	49	43			
20	26	14	18	14	27	Organizing group dynamics	55	60	47	48	30	37
27	34	24	28	51	54	Dramatizing	43	56	42	44	54	56
18	21	6				Producing television programs	47	67	38			
84	85	68	41	56	33	Operating audio-visual equipment✓	92	94	92	73	72	56
						LIST B. "ANALYZING AND APPRAISING" ACTIVITIES						
68	65	44	41	49	23	Getting acquainted with and evaluating films	90	90	84	92	78	86
70	68	45	49	56	27	Getting acquainted with and evaluating filmstrips	93	91	87	93	81	86
52	52	32	41	44	30	Getting acquainted with and evaluating recordings	76	79	70	82	74	83
50	48	27	36	46	17	Getting acquainted with and evaluating flat picture resources	85	82	78	84	73	57
48	50	35	30	43	23	Getting acquainted with and evaluating maps and globes	70	73	67	80	64	36
23	27	15	17	21	17	Getting acquainted with and evaluating programmed materials	71	75	59	61	50	37
52	60	53	56	50	63	Getting acquainted with and evaluating textbooks	66	77	70	77	73	76
48	55	49	97	87	67	Getting acquainted with and evaluating reference books	67	76	69	97	95	90
54	67	49	83	74	67	Getting acquainted with and evaluating free materials	80	87	83	98	93	84
50	54	46	80	73	66	Getting acquainted with and evaluating supplementary books	70	76	72	96	90	90
63	62	53	38	42	47	Planning field trips	67	83	79	71	70	87
63	69	53	45	58	60	Giving demonstrations	85	89	82	81	80	80

TABLE 5-5.--(Continued)

Pre-Institute						Specific Goals	Post-Institute					
% Rating Knowledge and Skill as "Expert" and "Passable"							% Rating Knowledge and Skill as "Expert" and "Passable"					
Ed Media Code			Librarians Code				Ed Media Code			Librarians Code		
1	2	3	1	2	3		1	2	3	1	2	3
						LIST C. "TEACHING WITH MATERIALS" ACTIVITIES						
94	82	70	62	64	43	Teaching with films	95	95	95	97	84	70
90	84	70	71	70	53	Teaching with filmstrips	92	96	93	98	88	84
78	68	46	55	60	43	Teaching with recordings	87	89	83	85	84	77
71	65	42	52	62	47	Teaching with flat pictures	83	90	85	92	79	70
78	72	52	53	52	47	Teaching with slides	93	94	91	86	71	73
80	64	39	27	36	17	Teaching with large transparencies	95	94	91	89	67	74
38	25	14	16	20	17	Teaching with radio programs	47	50	40	51	36	27
39	35	18	16	23	30	Teaching with television programs	69	77	60	54	40	24
21	24	11	8	20	33	Teaching with programmed materials	70	69	50	47	38	33
						LIST D. "ADMINISTRATIVE" ACTIVITIES						
45	33	15	23	18	3	Developing administrative procedures for new media centers	87	81	74	76	48	53
27	26	11	20	14	3	Designing facilities for new media centers	73	75	55	62	46	30
38	35	14	8	11	3	Developing specifications for new equipment purchases	75	76	70	46	43	27
47	56	30	48	56	37	Locating information about educational media	90	88	89	93	79	70
40	42	21	56	63	23	Cataloging educational media	77	70	73	90	76	46
57	48	31	27	34	13	Inspecting and maintaining educational media	78	80	77	55	54	20
28	27	18				Using AV materials in evaluating student performance	65	70	64			
13	19	7	5	15	3	Selecting teaching machines	52	49	40	46	30	17
10	17	6				Administering programmed instruction	51	56	39			
10	14	4				Designing and conducting "action research" studies relating to new educational media	35	48	32			

Activities in List A were related to the production of different kinds of instructional materials. For these activities taken together, both educational media and librarianship participants rated their pre-institute interest and skill and knowledge as relatively low. For all List A activities taken together, for example, an average of only 31% of all educational media and 23% of all library participants rated their interest as "high." Similarly, an average of only 34% of all educational media and 28% of all library participants rated their pre-institute competence with respect to these items (taken together) as either "expert" or "passable." Following the institutes, however, an average of 58% of all educational media and 37% of library participants rated their competence, for all these activities together, as either "expert" or "passable."

Activities in List B related to analyzing and appraising various types of instructional materials. Prior to the institutes, educational media and librarianship participants indicated they were quite interested in these activities (41% of all media participants and 52% of the total library group rated their interest as "high"), while their skill and knowledge with respect to these items was "moderate" (approximately 50% of both groups estimated their skill or knowledge as either "expert" or "passable").

Post-institute participant ratings, for both types of institutes, showed appreciable interim gains in skill and knowledge. Approximately 75% of both groups, for example, rated their end-of-institute competence with respect to all List B items as either "expert" or "passable."

Activities in List C related to teaching with different types of instructional materials. In their initial ratings, participants in both types of institutes (media and library) indicated high interest in these activities but low skill and knowledge with respect to three of them (radio programs, television programs, and programmed materials). Approximately 50% of each group (media and library), for example, rated their pre-institute interest as "high" for these activities. An average of approximately 47% of these same groups also rated their pre-institute competence as either "expert" or "passable," whereas, at the conclusion of the institutes, these average ratings had increased to 79% for educational media participants and 69% for library participants.

Activities in List D dealt with various aspects of the administration of educational media. Prior to the institutes, all groups of participants estimated their knowledge or skill with respect to these activities, as a whole, as being very low, and their interest in them as very high. An average of 51% of media participants rated their interest as "high" for these activities, taken as a whole. An average of only 22% of these participants rated their pre-institute competence as either "expert" or "passable," while 62% of them estimated their post-institute competence to be in either of the two categories. For these activities, taken together, an average of 46% of all librarianship participants rated their interest as "high" prior to the institutes; 23% rated their competence, at that time, as either "expert" or "passable." In contrast, an average of 47% of the librarianship participants rated their post-institute competence as either "expert" or "passable."

Specific Goals (Media Specialists and Librarians): Coverage

In the end-of-institute administration of the PERSONAL INFORMATION REPORT FORM: SECTION III, INTEREST INVENTORY (SPECIFIC GOALS), participants in educational media specialist and school library personnel institutes were asked to estimate how well various specific activities were covered in their institute programs.

As indicated in Table 5-6, at least half the Code 1, 2, or 3 educational media specialist institute participants rated a total of 15 specific activities as having been covered "very well" in institutes they attended.

Approximately 50% of all librarianship institute participants, on the other hand, indicated that the following activities were covered "very well" in the institutes they attended: (1) List A--making large transparencies; operating audio-visual equipment; (2) List B--getting acquainted with and evaluating films; getting acquainted with and evaluating filmstrips; getting acquainted with and evaluating free materials; (3) List C--teaching with films; teaching with filmstrips; teaching with large transparencies; and (4) List D--locating information about educational media.

The following activities from List A were reported as covered "not at all, or very little" by 66% of all librarianship institute participants; those activities marked with an asterisk were reported to have been covered "not at all, or very little" by 50% of all educational media institute participants: (1) using the chalkboard, (2) doing simple sketching, (3) making graphs and timelines, (4) preparing magnetic board materials, (5) *mimeographing, (6) *preparing copy for offset printing, (7) making homemade slides, (8) *mounting objects in plastic, (9) *making dioramas, (10) *making puppets and puppet theaters, (11) *building and stocking terraria, (12) *building and stocking aquaria, (13) taking still pictures, (14) taking motion pictures, (15) *editing film footage, (16) editing slide sets, (17) writing scripts, (18) doing close-up copying with camera, (19) doing darkroom work, (20) *building models, (21) *adding sound to magnetic-striped films, (22) synchronizing sound with slide sets, (23) *dramatizing, (24) *producing radio programs, and (25) producing television programs.

TABLE 5-6

PARTICIPANT RATINGS OF SPECIFIC ACTIVITIES COVERAGE IN EDUCATIONAL MEDIA INSTITUTE PROGRAMS

Specific Activities	"Very Well" Responses in Percentages Code 1		
	1	2	3
LIST A. "PRODUCTION" ACTIVITIES			
Making large transparencies	50	54	64
Mounting flat pictures	37	43	62
Doing close-up copying with camera	53	32	30
Producing television programs	28	52	33
Using lettering devices and aids	17	44	50
Operating audio-visual equipment	15	35	58
LIST B. "ANALYZING AND APPRAISING" ACTIVITIES			
Getting acquainted with and evaluating programmed materials	55	44	29
Getting acquainted with and evaluating films	33	26	53
LIST C. "TEACHING WITH MATERIALS" ACTIVITIES			
Teaching with large transparencies	42	46	65
Teaching with films	22	35	63
Teaching with television programs	28	51	40
Teaching with slides	25	34	52
Teaching with filmstrips	5	29	55
LIST D. "ADMINISTRATIVE" ACTIVITIES			
Locating information about educational media	65	38	58
Developing administrative procedures for new media centers	57	33	40

The following activities were reported as covered "not at all or very little" by 50% of all librarianship institute participants and, when marked by an asterisk, by 50% of all educational media institute participants: (1) List A--using lettering devices and aids; making charts; preparing flannel board materials; spirit duplicating; constructing learning devices; organizing group dynamics; (2) List B--*getting acquainted with and evaluating textbooks; getting acquainted with and evaluating maps and globes; (3) List C--*teaching with radio programs; and (4) List D--developing specifications for language laboratories; designing and conducting "action research" studies related to new educational media.

B EDUCATIONAL MEDIA INFORMATION TEST

By Richard C. McLaughlin
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In order to assess the status and changes in educational media knowledge of institute participants, the Educational Media Institute Evaluation Project (EMIE) requested the development of an objective paper-and-pencil test in the field. This instrument was developed experimentally during the summer of 1965 for possible use on a broader scale with the following year's institutes.

The 24 institutes comprising the population sampled in this phase of the study were selected by the EMIE Project. Of these, two were advanced media (A) institutes, three intermediate media (I) institutes, nine basic media (B) institutes, four special-purpose media (S) institutes, and six library-oriented (L) institutes. All but two of the 24 institutes received the first version of the McLAUGHLIN INSTRUCTIONAL COMMUNICATIONS EXAMINATION, FORM Q (MICE-Q) at the beginning of their sessions. Eleven of these, plus two previously untested institutes, received the second version of the McLAUGHLIN INSTRUCTIONAL COMMUNICATIONS EXAMINATION, FORM R (MICE-R) at the conclusion of their sessions. Five of the institutions originally tested with MICE-Q were again tested with the same form at the end of their sessions.

Development of the Test

Items used in compiling the first version, MICE-Q, were drawn from existing works. Items from the "Applicant Test" for the Educational Media Institute (1965) at the University of Southern California, for example, were provided by Robert Heinich. Permission was also obtained from the McGraw-Hill Book Company to use copyrighted items from the Teacher's Guide to Accompany A-V Instruction: Materials and Methods (second edition; Brown, Lewis, and Harcleroad, 1964). Dr. Eugene K. Oxhandler, Syracuse University, provided items from the information test appearing in the Pennsylvania State University project report, An Experimental Study of Patterns for Improving the Preparation of Pre-service Teachers in the Use of Audiovisual Materials and Effects on Pupils (Torkelson, 1965). Acknowledgment is gratefully made to the above persons for the use of their materials. In addition to the items drawn from outside sources, the compiler introduced a number of items previously constructed for use at Syracuse University over a period of two years in contact with the teaching of instructional communications. All items were edited, where necessary, to achieve greater uniformity of style and improvement, where possible.

Content of the Test

Table 5-7 shows the division of content into ten parts for each version of the examination. The major partitioning of the content resulted in four areas of communications reception: "vitae," visuals, audibles, and audio-visuals. The term "vitae" was coined to denote instructional materials and techniques which require the presence of the learner and exist independently of the separate channels of communications. "Vitae" therefore includes not only realia, but also models, community resources, and other categories not solely dependent upon a single artificial medium of communications (such as filmstrips, tape recordings, or motion pictures). Visuals, audibles, and audio-visuals, then, are concerned with separate, discrete artificial media and whatever characteristics they may share in common. The purpose for dividing the examination into parts is strictly for diagnostic convenience on the part of test users seeking weak points in an individual test performance. Users are advised not to attempt to generalize the results of part scores beyond the individual diagnostic situation, as there are too few items in most of the parts to warrant the attachment of statistical significance to an individual's performance on any of the separate parts of the examination.

TABLE 5-7

MICE TEST CONTENT AREAS

Part	Topic	No. Items
	MICE-Q	
1.	General	10
2.	Vitae - Utilization	16
3.	Vitae - Production	18
4.	Audibles - Utilization	16
5.	Audibles - Production	18
6.	Visuals - Utilization	20
7.	Visuals - Production	18
8.	Audio-Visuals - Utilization	16
9.	Audio-Visuals - Production	8
10.	Advanced	10
	MICE-R	
1.	Vitae - Utilization	8
2.	Vitae - Production	10
3.	Visuals - Utilization	18
4.	Visuals - Production	16
5.	Audibles - Utilization	12
6.	Audibles - Production	14
7.	Audio-Visuals - Utilization	12
8.	Audio-Visuals - Production	9
9.	Advanced	8
10.	Programmed Learning and Communications Theory	15

Test Reliability

The internal consistency of both forms of the MICE test was computed at the same time as item analysis took place through the use of the computer. The coefficient of internal consistency was determined by Kuder-Richardson Formula No. 20 to be 0.915 for 512 papers of MICE-Q and 0.926 for 468 papers of MICE-R. Using these figures, the standard error of measurement was determined to be 5.18 test score points for MICE-Q and 4.57 test score points for MICE-R.

The correlation for matched pairs between MICE-Q and MICE-R was 0.834 and between MICE-Q

TABLE 5-8

SUMMARY STATISTICS FOR MICE-Q AND MICE-R

Sample	N	Mean	Standard Deviation	T-Ratios				
Advanced - Q	60	107.1	12.6					2.10* (H_9)
Advanced - R	60	86.6	10.9	3.98 (H_1)				
Intermediate - Q	99	97.4	18.1		7.68 (H_3)	2.97 (H_5)		4.59 (H_{10})
Intermediate - R	91	81.1	14.0	2.36* (H_2)			5.14 (H_7)	
Basic - Q	201	95.5	13.9			$\underline{1.27}$ (H_6)		8.54 (H_{11})
Basic - R	196	80.0	9.9					
Educational - Q	360	96.3	15.8					10.98 (H_{12})
Educational - R	347	81.4	11.5	5.63 (H_4)				
Library - Q	50	83.7	14.7			6.87 (H_8)		2.59* (H_{13})
Library - R	47	66.2	18.1					

Note: All ratios shown ARE significant at the 0.05 level, except when underlined. Starred(*) ratios are not significant at the 0.01 level of confidence. The hypothesis being tested is indicated below each ratio.

and the second administration of the same form to the same examinees a correlation of 0.839 was obtained. The suggestion here is that a population ranked on one MICE form could reasonably be expected to be ranked in the same order by the other. However, the gross differences in means between any population's performance on the two forms preclude further speculation without test-retest or parallel form information.

Findings

In keeping with purposes listed in the EMIE Project prospectus, several null hypotheses were tested (see Table 5-8). The hypotheses were tested through t-tests for differences between means and between correlated means. The results are as follows:

1. Students who enroll for educational media training for the highest level of preparation and/or experience (advanced media or A-institutes) show no significant difference in knowledge of educational media at the start of the institute session from students who enroll in institutes designed for entrants who possess average competence (intermediate media or I-institutes). This hypothesis was rejected.[1] There were significant differences between these two groups.
2. Students who enroll for training at the I-institutes show no significant difference in knowledge of educational media at the start of the institute session from students who enroll in institutes designed for entrants with minimal preparation and experience in educational media (basic media or B-institutes). This hypothesis was rejected at the 0.01 level of confidence.
3. Students who enroll at A-institutes show no significant difference in knowledge of educational media at the start of the institute session from students who enroll in B-institutes. This hypothesis was rejected.
4. Students who enroll at educational media institutes show no significant difference in knowledge of educational media at the start of the institute session from students who enroll in library-oriented (L) institutes. This hypothesis was rejected.
5. Students who enroll at A-institutes show no significant difference in knowledge of educational media at the end of the institute session from students who enroll in I-institutes. This hypothesis was rejected.
6. Students who enroll at I-institutes show no significant difference in knowledge of educational media at the end of the institute session from students who enroll in B-institutes. This hypothesis was not rejected.
7. Students who enroll at A-institutes show no significant difference in knowledge of educational media at the end of the institute session from students who enroll in B-institutes. This hypothesis was rejected.

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[1] Status determined at the 0.05 level of confidence unless otherwise noted.

8. Students who enroll at educational media institutes show no significant difference in knowledge of educational media at the end of the institute session from students who enroll in L-institutes. This hypothesis was rejected.

9. Students who enroll at A-institutes show no significant difference in knowledge of educational media at the end of the institute session from A-institute students at the start of the institute session. This hypothesis was rejected.

10. Students who enroll at I-institutes show no significant difference in knowledge of educational media at the end of the institute session from I-institute students at the start of the institute session. This hypothesis was rejected.

11. Students who enroll at B-institutes show no significant difference in knowledge of educational media at the end of the institute session from B-institute students at the start of the institute session. This hypothesis was rejected.

12. Students who enroll at educational media institutes show no significant difference in knowledge of educational media at the end of the institute session from students at educational media institutes at the start of the institute session. This hypothesis was rejected.

13. Students who enroll at L-institutes show no significant difference in knowledge of educational media at the end of the institute session from L-institute students at the start of the institute session. This hypothesis was rejected.

Revision of the Test

The first 512 MICE-Q papers to be returned were subjected to item analysis via a high-speed digital computer. Results of the item analysis, in terms of point-biserial correlation coefficients and reliability indices, were used to prepare MICE-R, a revised and improved version of MICE-Q. A number of new questions were added in addition to the rewriting or dropping of items which had failed to perform well on MICE-Q. In preparing MICE-R, new instructions for administration were written along the guidelines set forth by Traxler, as were new directions written for return shipments by the institutes.

Scoring the Test

All test papers were scored on IBM 1230/534 Optical Mark Scoring equipment and the results processed via high-speed digital computer. The results were returned to the cooperating institutes in the form of frequency distribution histograms and individual test performance reports. The report data included only local population statistics and were not in any way related to the performance of examinees outside of the local test population.

Test Validity

A certain degree of content validity was established in advance, as discussed above in reference to Table 5-7. Undoubtedly, greater content validity would be possible in future versions of the examination through the use of a content universe approach. The compiler has investigated this possibility in terms of the cognitive domain in the Taxonomy of Educational Objectives (Bloom, 1956).

The concurrent validity of MICE was surveyed in both forms through the use of external criteria indices. The radical changes in the categories from rather high correlations in general before undertaking institute work to quite low correlations at the conclusion of institute work rather dramatically illustrate that the institute experiences tend to remove the advantages usually associated with position and years of experience or level of educational attainment, insofar as relative success on MICE is concerned.

Conclusions

The results of the 1965 testing program clearly show that learning experiences took place throughout the various institutes. Those differences due to time and prior experience which enabled superior performance on the information test at the beginning of the institute sessions were severely curtailed in their relation to superior performance on the information test at the conclusion of the institute sessions. Most significantly, the basic media institutes succeeded in producing persons equally competent in basic knowledge of educational media with persons completing the intermediate institutes, as determined by performance on the McLAUGHLIN INSTRUCTIONAL COMMUNICATIONS EXAMINATION.

It would seem appropriate to use this examination as a selection instrument for future institutes. The use of control populations and the establishment of predictive validity as a selection instrument would increase the versatility of the examination. The general use of MICE would be of help to both the institutes and prospective participants in that persons applying to one type of institute may be referred to an institute of another type more suited to the applicant's abilities.

C MEASUREMENT OF ATTITUDE CHANGE

By Curtis Paul Ramsey
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for Teachers

The media attitude measurement evaluation report that follows, related to the educational media specialist institutes and the institutes for school library personnel, is based upon an earlier Title VIIA (NDEA) effort. That research was started in 1959 as part of a series of regional leadership development conferences conducted by the Department of Audiovisual Instruction and the Association for Supervision and Curriculum Department, National Education Association, dissemination activity (Title VIIB, NDEA). Subsequently, an NDEA research project was proposed and funded to develop and validate a new media attitude scale.[1]

Validation

A comprehensive and exhaustive survey of the literature of the period 1950-60 was conducted to seek out and isolate specific examples of statements (in the literature) regarding sympathy with or hostility toward newer educational media for instructional purposes. Predominantly, of course, the literature referred to here included those journals and periodicals generally read by teachers. From a collection of 375 items so identified, a refined list of 78 statements was developed for inclusion in the final research vehicle, New Media Attitude Scale-2.

The 78 items for inclusion in NMAS-2 were then edited and rewritten in conformity with criteria suggested by Wang for the construction of attitude statements. The original research hypothesis (that the individuals responding to such items could be dichotomized and identified) rests upon the bi-modal attitude construct advanced by Stogdill.

A five-point scale of response suggested by Likert's studies was chosen, as follows: (1) very strong disagreement, (2) moderate disagreement, (3) neutral--neither agree or disagree, (4) moderate agreement, (5) very strong agreement.

Sample

Mailing lists of the membership of the Association for Supervision and Curriculum Development (NEA) and of the Department of Audiovisual Instruction (NEA) were secured and numbered consecutively. A random ten per cent sample was chosen from each organization, 678 names from the ASCD list and 440 names from the DAVI list. Together with the appropriate cover letters requesting cooperation, the research vehicle (NMAS-2) was mailed to the above numbered individuals. Returns included 65.3% from ASCD members, and 61.8% from DAVI members.

Results

Item analysis and analysis of variance procedures were utilized to identify those items from the experimental vehicle which significantly discriminated between those persons sympathetic with and those hostile toward educational media. In the final analysis, 39 items were identified which discriminated hostility and sympathy for audio-visual utilization, using randomized analysis of variance procedures. Significance was accepted at the .01 level for the final 39 items included. It is this refined list of 39 items, validated on the research of 1959-1960, which served as the base for the questionnaire, CONTROVERSY IN ACADEMICIA, which was utilized in the attitude assessment phase of the Educational Media Institute Evaluation Project reported here.

Questionnaires were sent to the directors of the 18 educational media specialist institutes and of the six school library personnel institutes identified for intensive study. The questionnaire, CONTROVERSY IN ACADEMICIA, was administered in the first week and during the last week of the respective institutes, except for the library institutes, where only the pre-institute questionnaire was administered.

Some attrition was experienced, and not all participants completed all items on the first and second administrations of the questionnaire. These incomplete forms were not included in final tabulations. Also, in three of the media institutes administration of the questionnaire was inadequate (no names were signed to either the first or second set) and hence it was impossible to match up an individual's responses on both questionnaires. The intensive analysis reported below is based upon all 24 groups, in some cases the 18 media institutes (pre-institute data), or upon the 15 media institutes for which complete data (pre- and post-) were obtained.

Findings

Randomized analysis of variance procedures, with appropriate *t*-tests and tests of significance were conducted within participant code groups, across pre-tests (and post-tests where available), and between media and library groups (where possible). Several findings of note are important:

- Initial differences in attitudes toward newer media (as revealed by pre-institute tests) were discovered. Media groups 3 and 2 (participant code) possessed the highest and most favorable attitudes toward media, followed by 4 (special institutes), 1, and 5 (library institutes) with the lowest pre-institute attitudes toward media utilization in instruction. Ten *t*-tests were run (all possible combinations) to discover any differences significant at the .01 level. The differences were not statistically significant with this treatment. Table 5-9 displays the data on this tabulation.

TABLE 5-9

COMBINED PRE-TEST SCORES FOR CODE GROUPS 1-5

Code	Types of Institutes	Total No.	Code Mean	Standard Deviation
1	Institutes for advanced professional training (2 institutes)	58	148.64	8.85
2	Institutes for applicants already possessing competence in certain new media fields (3 institutes)	117	154.08	12.55
3	Institutes for applicants possessing minimal preparation (8 institutes)	317	155.28	11.02
4	Special institutes (5 institutes)	149	149.69	12.54
5	Librarianship institutes (6 institutes)	220	143.58	12.43

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[1] Complete copies of the final report of the project are available from the author; they are also on deposit at the 60 libraries that are a part of the Governmental Documents Expediting Service.

- Great variation of attitude existed within code groups, as well as within individual institutes. Such variation tends to obscure between group differences. On the complete data for the 15 media groups, not separated into codes, an F-ratio of 3.65 was obtained, which is significant at the .01 level. This finding substantiates the conclusion that homogeneous populations were not selected for institute attendance, and that large pre-institute differences existed.

- When the 24 institutes for which pre-institute data were available were regrouped into code designations, a significant difference among code designations (mean scores) was found. An F-ratio of 5.39 was obtained, significant at the .01 level. Code 2 and 3 groups were not significantly different, but both were significantly greater than Codes 1 and 4, which in turn were greater than Code 5 (Library). Table 5-10 shows all institutes studied intensively in this work, with pertinent data on each so studied institute. Media institutes with incomplete post-institute scores are those for which either first or post administrations were unidentified, causing tabulations to be made only on the first set of papers.

TABLE 5-10

SUMMARY DATA ON FIVE GROUP CLASSIFICATIONS

Group Number	Pre-Test Scores Mean	Pre-Test Scores SD	Post-Test Scores Mean	Post-Test Scores SD	Mean Gain
Code 1					
08 30	149.27	9.27	155.57	10.42	6.30
20 28	147.96	8.51	150.46	8.48	2.50
Code 2					
02 30	158.93	9.43			
21 52	151.08	10.00	150.79	12.03	-.29
22 35	149.89	16.09	154.71	10.35	4.83
Code 3					
04 24	158.83	10.03	160.42	9.38	1.58
06 48	155.50	7.64	162.94	9.63	7.44
10 75	151.79	12.46	153.75	10.75	1.96
12 30	155.87	10.27	159.97	9.65	4.10
14 33	152.91	9.37	154.67	10.94	1.76
15 25	153.28	10.06	166.80	10.38	13.52
17 50	148.16	9.26	149.10	9.74	.94
19 32	148.09	10.82			
Code 4					
01 31	149.45	11.59	152.26	9.01	2.81
03 38	146.53	14.10	151.18	10.53	4.66
05 38	147.05	13.48			
09 16	151.00	9.31	152.81	9.97	1.81
18 26	157.65	7.87	153.50	7.53	-4.15
Code 5					
07 40	145.88	9.40			
11 30	144.30	14.40			
13 40	149.63	12.33			
16 50	138.18	11.41			
23 36	141.47	13.41			
24 24	143.21	10.34			
			Total Mean Gain		3.15

- A considerable range of attitude existed within groups and between groups, as indicated by the pre-institute range of standard deviations (7.64-16.09). Variability decreased somewhat at the post-institute point of evaluation, suggesting the effect of institute activity to bring participants closer to the same point of view.

- Significant gains in attitude were produced by the institute activity, as revealed by the complete data available on 15 media institutes. The mean gain over all 15 groups was 3.15 points. (The scale produces a "neutral" score of 117; a "perfect" score in media sympathy would be 195.) Mean scores for individual institutes can be compared with the base of 117. The lowest mean score produced at the pre-institute level was 146.53 and the lowest mean score at post-institute was 149.10. The highest pre-institute mean score was 158.93; the highest post-institute mean score was 166.80.

- Attitude gain was selective, i.e., the major source of variation was the between groups treatment, rather than the within groups treatment. An obtained F-ratio of 3.64 was significant at the .01 level for between groups. Hence, gain scores as indicated in Table 5-10 can be scanned for analysis of relative gain for specific institutes.

- Although post-institute attitude measurement of school library institutes was not obtained, there were observable pre-institute differences (not statistically significant) between mean attitude scores of Code 1 and Code 2 library institute participants. Higher mean scores were obtained from library personnel with less professional library training, i.e., Code 2's were higher than Code 1's. No "pure" Code 3 groups were studied intensively.

Conclusions

Pre-institute attitudes toward newer media for instructional purposes were highly variable, both within groups of like preparation and between different groups and code groupings. Variability was decreased during the course of institute exposure, and mean gains in attitudinal sympathy toward the media were reported for almost all institutes.

There was no discernible pattern of gain; that is, large gains in attitudinal sympathy were posted in all categories of code groupings. Low patterns of gain existed in all groups, as well. Some individuals showed marked growth in sympathetic attitude, others little growth; a few exhibited lowered sympathy. In some cases this lowered sympathy was most likely due to a more realistic appraisal of the potential and limitation of media.

There can be no doubt that the institute activity produced, in general, highly favorable changes in attitude toward utilization of media for instructional improvement. No correlations have been attempted to assess which institutes, and what kinds of institutes, may have produced the most marked attitudinal change, other than along the lines of participant preparation codes. Additional normative data on mean attitudinal sympathy now exist, as a result of this evaluation activity, to develop more precise and discriminative analyses of similar future activities.

Chapter 6

CONTENT INSTITUTE VISITS

A further important responsibility of the EMIE Project during Summer 1965 was to conduct a sampling study of the scope and quality of attention given to "new instructional materials" in NDEA institutes for English, reading, modern foreign languages, geography, and history, as well as for teachers of disadvantaged youth and school librarianship personnel. Table 6-1 indicates the distribution of these institutes by fields, except for modern foreign languages.[1]

Two methods were used to assess attention given to "new instructional materials" in these institutes. The first involved the temporary employment of several individuals, each of whom had special competence with respect to instructional materials in one of the content fields. These individuals were assigned to visit a predetermined number of institutes and to describe, in written reports, the current status of attention given in them to new instructional materials. Procedures, methods, and results of these visits are discussed first in this chapter.

A second approach to gathering data for this phase of the EMIE study involved use of a brief questionnaire sent to 371 institute directors

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[1] Four modern language institutes were visited in connection with this study during Summer 1965. No further data were obtained from this group.

TABLE 6-1

CONTENT INSTITUTES, SUMMER 1965, BY FIELD

Field	No. of Institutes Questioned	No. of Returns	% of Returns
English	105	93	89
Reading	53	43	81
Geography	41	29	71
History	83	58	62
Teachers of disadvantaged youth	63	40	63
School librarianship personnel	26	23	88
Totals	371	286	77[a]

[a] Average

(as indicated in Table 6-1) near the end of the Summer 1965 sessions. By this means, directors were asked: (1) to assess the amount of attention given in their institutes to each of five "new instructional materials" activities, and (2) to indicate whether or not they would be interested in attending a special institute, during the academic year, to become better acquainted with the scope and use of new instructional materials in their separate fields, and, if so, for what preferred period of time.

On-site Visits

On-site, "in person" visits to 24 content institutes, in all, were originally planned for the EMIE Project--four each for English, reading, geography, history, and modern foreign languages, as well as for teachers of disadvantaged youth.[1] Institutes selected (upon recommendation of directors of the evaluation of all institutes in the field, as mentioned in Chapter 1) and individuals assigned to conduct the visits were as follows:

English (Dr. Martha Cox, San Jose State College)

University of Puerto Rico, Rio Piedras, Puerto Rico
Bread Loaf, Middlebury College, Vermont
Chicago Teachers College North, Chicago, Illinois
George Peabody College for Teachers, Nashville, Tennessee

History (Dr. Beryl Blain, Indiana University)

University of Dayton, Dayton, Ohio
Carnegie Institute of Technology, Pittsburgh, Pennsylvania
Lamar State College of Technology, Beaumont, Texas
University of Rochester, Rochester, New York

Geography (Dr. Gilbert Tanner, Wisconsin State College, Eau Claire)

Oregon College of Education, Monmouth, Oregon
Western Illinois University, Macomb, Illinois
Wayne State University, Detroit, Michigan
Louisiana State University, Baton Rouge, Louisiana

Reading (various visitors)

Virginia Union University, Richmond, Virginia
Tufts University, Medford, Massachusetts
University of Kansas Medical Center, Kansas City, Kansas
San Jose State College, San Jose, California

Teachers of Disadvantaged Youth (Dr. Samuel Madden, Virginia State College; Dr. Gene Whitehorn, California State College at Hayward)

New York Medical College, New York City, New York
Bethune-Cookman College, Daytona Beach, Florida
San Francisco State College, San Francisco, California
College of Notre Dame, Belmont, California

Modern Foreign Languages (Dr. Dora Bashour, Hunter College)

Kalamazoo College, Kalamazoo, Indiana
Colgate University, Hamilton, New York
Hampton Institute, Hampton, Virginia
Teachers College, Columbia University, New York City, New York

The on-site visitor studying "new instructional materials" joined, at each institute, a team of evaluators whose concerns lay with broader aspects of the program observed. Greater comparability and continuity in studying and reporting on new materials activities were sought at this stage through use of "General Guidelines for Evaluating New Materials Activities in Various Content NDEA Institute, Summer 1965," prepared by the EMIE staff and based upon "Suggested Criteria for Institute Evaluators" furnished by the Title XI, NDEA office, U.S. Office of Education. On-site visitors spent two full days observing each institute.

Several possible sources were suggested in the guidelines statement as means of obtaining data useful in assessing types, amounts, and quality of attention to "new instructional materials" in institutes visited, as follows:

1. Specified course content. In course or program outlines or syllabi within the institute, is specific reference made to "new materials"? Are participants given reading or project assignments--in or out of class--that require them to study and analyze new instructional materials for possible later use in their teaching?

2. Special activities and facilities. Have plans been made for any or all of the following in connection with the institute: (a) special exhibits of new instructional materials--books, films, filmstrips, recordings, charts, and the like, (b) special demonstrations in techniques and standards for selecting and/or using these

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[1] Visits were carried out, as planned, in all but for those in reading. Difficulties encountered in obtaining suitable personnel to conduct the visits, coupled with the lateness of planning them, made it impossible to complete all of them on time.

materials in teaching, (c) laboratory facilities, with qualified staff on hand, to enable institute participants to improve their skill in producing useful instructional materials--charts, transparencies, mounted pictures, tape recordings, slides, etc., (d) laboratory facilities to assist participants in becoming more adept in operating audio-visual equipment, (e) lectures on new materials selection and/or utilization by special consultants, (f) field trips to obtain firsthand familiarity with facilities or resources related to the institute's field of study, and (g) facilities in which students and faculty are permitted to preview, audition, or examine new instructional materials?

3. Use of institutional resources. Does the institution maintain an "instructional materials center" or "audio-visual center"? Are its facilities and resources (including those of its trained, professional staff) made available to participants and staff of the institutes you are to study? Are offerings of this center adequate to needs of the institute? Have the institutional libraries rendered similar services with regard to "new materials" (book lists, book exhibits, special services, etc.)?

4. Availability of source lists, catalogs, etc. Do the institutes make available to participants lists of selected new instructional materials? Are film, filmstrip, recording, chart catalogs (or others) readily available to participants? Is there a display of them?

5. The original institute proposal. If possible, obtain from the director a copy of the original institute proposal submitted to the U.S. Office of Education. Very likely, this document will contain references to planned uses of facilities and resources--including those pertaining to "new materials."

6. Student and staff interviews. Talk with students, as feasible, to learn about their experiences with new materials through the institute. What materials have they actually seen, heard, evaluated, or used? What skills, with respect to these materials, if any, have they developed or improved during the institute period?

7. Classroom observations. Arrange with the institute director and staff members involved to visit classes in which "new materials" will be used, demonstrated, or discussed. If you cannot remain for a full period, be sure the instructor knows, in advance, of your need to leave early.

Individuals assigned to observe the scope and quality of attention to new instructional materials were asked, in the guidelines statement, to prepare two kinds of reports, as follows:

1. Individual institute reports. A separate, brief report for each institute visited. Such individual reports should be based on data gathered through activities recommended in preceding sections of these guidelines. A suggested outline for the report is as follows:

(1) General description of the institute (without repeating details covered in the institute proposal which should be sent along with the report)

(2) A listing and brief description of activities undertaken by you during the course of your visit, giving special attention to those that involved "new materials"

(3) Assessment of the scope, quantity, and apparent quality of attention to "new materials" in the institute program (before the visit, during the visit, planned for later stages of the institute program)

(4) Outstanding strengths of the attention to "new materials" (including some which might properly be called to the attention of other institute directors or included in suggestions for 1966 institutes)

(5) Any other observations (including those involving apparent neglect of "new materials") that should be considered in general plans for 1966 institutes

2. Summary report. Upon concluding your set of site visits, please prepare a brief summary report that includes your over-all evaluation of "new materials" emphases in all the institutes taken together. Because this report will be based upon impressions from several evaluations, its perspective should be a helpful means of suggesting recommended lines of action with respect to "new materials" for Summer 1966 institutes.

Table 6-2 presents information concerning the frequency with which "some attention" (ranging from considerable to very little) was given to various types of new instructional materials and procedures before, during, or proposed for some time after the occasion of the on-site visit. Tabulations were made on the basis of entries in visitors' reports; they represent only instances, not quality, of such uses. Analysis of these entries and of the more detailed comments contained in reports of on-site visitors suggests the following observations:

1. It appears that, at least to some extent, nearly all institutes visited did give attention to "new instructional materials" in their programs of study and activities.

2. The quality and frequency of that attention varied considerably--ranging from "very little" and "poor" to "considerable" and "good." For the most part, however, on-site visitors assessed this use as being far below the expected potential for the fields concerned.

3. The most frequent uses of new instructional materials and techniques appeared to occur in modern foreign languages. Considering the past history of attention to new media generally in institutes in that field, this fact is not surprising.

4. Institute directors appeared in most instances not to be aware of the full scope and variety of available new instructional materials applicable to needs of elementary or secondary teachers in their fields. On-site visitors were unanimous in their belief that were such information to be generally available to directors of future institutes, a considerable increase in

scope and quality of attention to new instructional materials would result.

5. On-site visitors concluded that, in general, institute directors and participants alike regarded as important and useful the kinds of involvement they had had with new instructional materials.

TABLE 6-2

ATTENTION GIVEN TO NEW INSTRUCTIONAL MATERIALS IN CONTENT INSTITUTES

Types of Materials	Institute Field				
	History	Geography	English	Foreign Language	Disadvantaged Youth
Printed					
Textbooks (required)	3		2	4	
Reference and source books	4	2	4	4	4
Pamphlets	4		2	3	3
Programmed materials		1		1	2
Teacher aid materials	4			1	1
Microcards					
Projected					
16mm films	4	4	4	3	4
8mm films (including "loops" or "single concept" films)	2	2	2	3	3
Slides (with or without accompanying recordings)	3	4	1	3	1
Filmstrips (sound or silent)	3	1	1	4	
Large transparencies	3	4	3	4	2
Television					
Closed circuit	1	2	1		
Live ETV programs					
Videotapes	1	1		1	
Kinescopes	2		1		
Recordings					
Tape	4	2	3	4	3
Disk	2	3	2	2	1
Visuals (non-projected)					
Maps and globes	4	4	1		
Charts (singly and in series)		1	1	4	2
Pictures (singly and in series)	2	3	2	1	3
Miscellaneous					
Multi-media kits	1				
Exhibits	2	1		3	3
Community resource files					
Models		1		1	2
Field trips	2	3	1		
Number of institutes visited	4	4	4	4	4

Questionnaire Survey

The U.S. Office of Education also requested that the EMIE Project conduct a brief questionnaire survey to determine if directors of Summer 1965 institutes would be interested in and willing to attend special institutes designed to acquaint them with the scope and usefulness of a variety of new instructional materials appropriate to their fields of study. It was assumed, for purposes of this survey, that Summer 1965 institute directors would represent a group quite similar in background and interests to those of Summer 1966 and that responses to such questions could be interpreted as indicative of the preferences of this latter group.

Also included in the questionnaire were directions calling for directors' ratings ("considerable," "some," or "little or none") of attention given to five "new instructional materials activities," as follows: (1) arranging special exhibits of new instructional materials (books, films, recordings, charts, and the like), (2) providing laboratory facilities in which enrollees were aided in developing skill in producing simple instructional materials (charts, large sets, displays, and the like), (3) giving special demonstrations of recommended ways of utilizing instructional materials, (4) requiring or encouraging enrollees to become acquainted with or to review critically various new instructional materials (films, books, recordings, and the like) related to the field of your institute, and (5) providing source lists, catalogs, study guides, or similar publications describing the availability and content of new instructional materials.

The questionnaire itself was distributed to a total of 371 individuals (as indicated in Table 6-1) who directed Summer 1965 institutes in the fields of English, reading, geography, and history, as well as for teachers of disadvantaged youth and school librarianship personnel. The following results are based upon returns of 286 questionnaires (77% of those sent out) received by October 1, 1965, at the time this analysis was prepared.

In response to the question, "If you were to be an institute director for Summer 1966, would you be interested in attending a special institute (during Spring 1966) in one of three locations in the United States for the sole purpose of allowing you to improve or extend your acquaintance with new materials, equipment, and utilization techniques related to your special field?", the response indicated that nearly all (257 of 286) thought it would be a good idea. More specifically, percentages of persons indicating preferences to one of three choices were: 56% "interested in attending," 34% "interested in attending, but not sure of being able to do so," and 10% "not interested." Table 6-3 indicates the frequency of response, by field, to the three choices given. It is interesting to note that 100% of directors of institutes for school librarians and for teachers of disadvantaged youth indicated interest in such training and that a majority, in each case, would definitely attend.

In response to the question, "If you were to attend such an institute, would you prefer that it last no more than: one week? two weeks? some other length of time (please specify)?", the large majority supported "one week." Percentages assigned to each of the three choices

TABLE 6-3

DIRECTOR INTEREST IN ATTENDING SPECIAL "NEW MATERIALS INSTITUTE," BY FIELD

Field	Number of Returns	Percentage Interested in Attending	Percentage Interested, But Not Certain of Being Able to Attend	Percentage Not Interested in Attending
Geography	29	52	34	11
English	93	47	42	11
Reading	43	63	26	11
History	58	50	34	16
Librarianship	23	86	14	0
Disadvantaged youth	40	68	32	0

were: 74%, "one week," 3%, "two weeks," and 23%, "other length." The range specified for the latter alternative was from "two days" to "six to eight weeks." A majority of directors who specified some preferred length other than one or two weeks selected "three days."

Many written comments also accompanied returned questionnaires. These communicated the fact that spring is not considered the most advantageous time to hold special training institutes. The months of January or February were highest on the list of those who indicated a preference.

In the questionnaire portion calling for ratings of attention given to five "new instructional materials activities" during Summer 1965, certain differences among institute types were noted. Table 6-4 presents these results as percentages of ratings of "considerable," "some," or "little or none" assigned as indicators of this attention. "Providing laboratory facilities" (Activity 2) was given the lowest rating of attention in the content fields sampled. The fact that many respondents indicated in their returns that they regarded this activity as extraneous to the essential purposes of Title XI institutes appears to be reflected for this item in the unusually high percentage in the "little or none" column.

TABLE 6-4

NEW INSTRUCTIONAL MATERIALS ACTIVITIES, SUMMER 1965 (IN PERCENTAGES), ALL FIELDS, FOR 286 RETURNS

Activity	Attention Given to This Activity During Summer 1965		
	Considerable	Some	Little or None
1 Arranging special exhibits of new instructional materials (books, films, recordings, charts, and the like)	56	38	6
2 Providing laboratory facilities in which enrollees were aided in developing skill in producing simple instructional materials (charts, large transparencies, slides, flat picture sets, displays, and the like)	23	31	46
3 Giving special demonstrations of recommended ways of utilizing instructional materials	39	44	17
4 Requiring or encouraging enrollees to become acquainted with or to review critically various new instructional materials (films, books, recordings, and the like) related to the field of your institute	60	36	4
5 Providing source lists, catalogs, study guides, or similar publications describing the availability and content of new instructional materials	70	27	3

Tables 6-5, 6-6, 6-7, 6-8, and 6-9, following, provide further ratings assigned to each of foregoing five "new instructional materials" activities according to institute fields--for English, history, geography, and reading, and for teachers of disadvantaged youth and school librarianship personnel.

TABLE 6-5

ATTENTION GIVEN TO ARRANGING SPECIAL EXHIBITS OF INSTRUCTIONAL MATERIALS (BOOKS, FILMS, RECORDINGS, CHARTS, AND THE LIKE), SUMMER 1965, IN PERCENTAGES

Institute Content	Amount of Attention		
	Considerable	Some	Little or None
Geography (N = 29)	25	41	7
English (N = 93)	58	33	9
Reading (N = 43)	72	26	2
History (N = 58)	43	50	7
Librarianship (N = 23)	74	21	5
Disadvantaged youth (N = 40)	49	49	2

■■ Comment. Somewhat as might have been expected, a large majority of the reading and school librarianship institutes were reported to have given "considerable" attention to arranging special exhibits of instructional materials for their participants, whereas only approximately half of the remainder did. The small percentages entered in the "little or none" category suggest the relative importance of this activity to all institutes.

TABLE 6-6

ATTENTION GIVEN TO PROVIDING LABORATORY FACILITIES IN WHICH TO DEVELOP SKILL IN PRODUCING SIMPLE INSTRUCTIONAL MATERIALS, SUMMER 1965, IN PERCENTAGES

Institute Content	Amount of Attention		
	Considerable	Some	Little or None
Geography (N = 29)	46	39	15
English (N = 93)	10	22	68
Reading (N = 43)	23	49	28
History (N = 58)	22	18	60
Librarianship (N = 23)	32	41	27
Disadvantaged youth (N = 40)	31	41	28

■■ Comment. Table 6-6 confirms, to some extent, the comments entered by many English and history institute directors who pointed out that, to them, provision of laboratory or production facilities or activities was not within the intended scope of Title XI institutes. While all the remaining institutes devoted "some" or "considerable" attention to such activities, the number assigning a "little or none" rating to this activity is especially high.

TABLE 6-7

ATTENTION GIVEN TO PROVIDING SPECIAL DEMONSTRATIONS OF RECOMMENDED WAYS OF UTILIZING INSTRUCTIONAL MATERIALS, SUMMER 1965, IN PERCENTAGES

Institute Content	Amount of Attention		
	Considerable	Some	Little or None
Geography (N = 29)	66	17	17
English (N = 93)	26	60	14
Reading (N = 43)	56	30	14
History (N = 58)	24	45	31
Librarianship (N = 23)	61	35	4
Disadvantaged youth (N = 40)	41	41	18

■■ Comment. The least attention to special demonstrations of recommended ways of utilizing instructional materials appears to have been given in the history institutes, whereas the geographers emphasized this activity. Again, assignments of "little or none" rating to this category were higher (for all but librarianship institutes) than for activities mentioned in Tables 6-5, 6-8, or 6-9, although it fared somewhat better than the "provision of laboratory facilities" presented in Table 6-6 preceding.

TABLE 6-8

ATTENTION GIVEN TO REQUIRING OR ENCOURAGING ENROLLEES TO BECOME ACQUAINTED WITH OR TO REVIEW CRITICALLY VARIOUS NEW INSTRUCTIONAL MATERIALS (FILMS, BOOKS, RECORDINGS, AND THE LIKE), SUMMER 1965, IN PERCENTAGES

Institute Content	Amount of Attention		
	Considerable	Some	Little or None
Geography (N = 29)	41	52	7
English (N = 93)	57	38	5
Reading (N = 43)	77	23	0
History (N = 58)	48	40	12
Librarianship (N = 23)	96	4	0
Disadvantaged youth (N = 40)	56	44	0

■ Comment. Table 6-8 suggests that much attention was given in Summer 1965 institutes to requiring or encouraging enrollees to become acquainted with various new instructional materials. More attention appears to have been given to this activity in librarianship personnel institutes than in others, although the "considerable" rating was relatively high for several. Only a very small percentage was registered for any but history in the "little or none" category.

TABLE 6-9

ATTENTION GIVEN TO PROVIDING SOURCE LISTS, CATALOGS, STUDY GUIDES, OR SIMILAR PUBLICATIONS DESCRIBING THE AVAILABILITY AND CONTENT OF NEW INSTRUCTIONAL MATERIALS, SUMMER 1965, IN PERCENTAGES

Institute Content	Amount of Attention		
	Considerable	Some	Little or None
Geography (N = 29)	83	14	3
English (N = 93)	67	29	4
Reading (N = 43)	67	33	0
History (N = 58)	59	38	3
Librarianship (N = 23)	100	0	0
Disadvantaged youth (N = 40)	69	26	4

■ Comment. Attention to providing source lists, catalogs, study guides, and similar publications pertaining to new instructional materials appears to have been the single most frequently mentioned activity in this survey and suggests for it a high value attachment by institute directors generally.

Recommendations

Several recommendations appear to be supported by the data gathered in completing this portion of the EMIE study:

1. A series of short, one-week "new materials" institutes for each content area represented in the NDEA institute program for the 1966 sessions should be organized. The staff of such institutes should be composed of content specialists, media specialists for the particular field, and, as necessary and advisable, general media specialists (e.g., librarians, television production personnel, programmed instruction specialists, graphics producers, and others). While certain content and "new materials" matters might be stressed in these short institutes that would apply generally to all the various fields, a major portion of the content for each institute should grow out of the needs and potential of each separate field.

2. Consideration should be given to assigning a "materials" person (an educational media specialist, a school librarian, or, preferably, one who performs well in either capacity) to the professional staff of each content institute. This individual could thus assume primary responsibility for full and proper liaison between the institute and the campus audio-visual center, library, television facility, or other agencies. He could also handle matters pertaining to previews or auditioning, materials procurement, materials exhibits, and laboratory instruction in the production of materials or operation of equipment.

3. Appropriate funding should be obtained with which to finance preparation of special bibliographies of materials appropriate to areas emphasized in the several kinds of content institutes. These bibliographies should include sources, costs, and other data about materials described.

4. The intent of Title XI of the National Defense Education Act with respect to attention to "new materials" in content institutes should be clarified. By a variety of means, future institute directors should be made aware of the appropriateness and desirability of reviewing and studying, in even their graduate courses, instructional materials produced explicitly for use in the instruction of elementary and/or secondary school students.

5. Effort must be continued to assess the extent and quality of attention to "new materials" in content institutes of future years, using means similar to those employed during the Summer 1965 session.

Chapter 7

CONCLUSIONS AND RECOMMENDATIONS

A brief history of National Defense Education Act institutes for advanced study for elementary and secondary teachers makes stimulating reading. In the few short years of its existence, the Act has been responsible for many benefits to American education. Support of institutes by NDEA began in 1958 with the language development programs; since then they have provided modern foreign language training to thousands of teachers.

Large-scale expansion of the NDEA institute program began in October, 1964, with repeal of an earlier Act and substitution of the now familiar "Title XI." While retaining the previous foreign language training provisions, the new Act offered similar financial support for institutes in history, geography, English, and reading as well as for teachers of disadvantaged youth, for school library personnel (school librarians and supervisors), and for educational media specialists. During Summer 1965 nearly 500 institutes, attended by approximately 20,000 school personnel, were offered under the provisions of this new Act. Numbers of such institutes and their separate enrollments, by field, are given in Table 7-1.

TABLE 7-1

NDEA TITLE XI INSTITUTE ENROLLMENTS
SUMMER 1965

Field	No. of Institutes	Institute Enrollment
History	84	3,183
Geography	40	1,493
Reading	53	2,081
English	105	4,479
English as a Foreign Language	4	190
Modern Foreign Languages	83	4,148
Teachers of Disadvantaged Youth	63	2,522
School Library Personnel	26	994
Educational Media Specialists	36	1,377
Totals	494	20,467

All institutes under the NDEA Act of 1964 have been expected to provide, among other things, opportunities for "advanced study in the use of new materials." While this provision affects content field institutes (those for English, reading, disadvantaged youths, and the like), it is intimately related to the 36 educational media institutes and to the 13 or so institutes stressing the "instructional materials center" concept in the work of school librarians with which the EMIE Project has been involved.

The purposes of the EMIE Project were as follows:

1. To provide a single, accurate historical and statistical record of the educational media institutes for Summer 1965 and Summer 1966.

2. To facilitate improved planning for and the conduct of future institutes for media specialists and certain types of school library personnel.

3. To provide evaluations of both the immediate and relatively long-term influences upon participants in the "educational media" and "school librarianship" institutes of the type that emphasize instructional materials center development and operation.

4. To provide similar, but less comprehensive, evaluations of "new materials" outcomes for participants in a relatively small sampling of institutes for all of the other fields (English, reading, geography, history, disadvantaged youth, and modern foreign languages) represented in current institute programs.

5. To explore possibilities of developing and refining two evaluative instruments (one to measure basic knowledge and background and one to measure attitudes pertaining to "new media" selection, utilization, and management) during Summer 1965 for possible future use, as appropriate, with succeeding institutes.

In carrying out the purposes of the EMIE Project, the following aspects of educational media specialist and selected school librarianship institutes conducted during Summer 1965 were examined: (a) characteristics of institutes, (b) characteristics of students, (c) characteristics and performance of institute staff members, (d) characteristics and quality of institute instructional programs, (e) scope and quality of institute instructional resources, (f) characteristics and quality of physical facilities and of living-dining arrangements, and (g) status and changes in new media interests, competencies, information, and attitudes of institute participants.

A further important responsibility of the EMIE Project for Summer 1965 was to conduct a sampling study of the scope and quality of attention given to "new instructional materials" in NDEA institutes for English, reading, modern foreign languages, geography, and history, as well as for teachers of disadvantaged youth and school librarianship personnel. Two new methods were used to assess this attention. The first involved the temporary employment of several individuals, each having special competence with respect to instructional materials in an appropriate content field. These individuals were assigned to visit a predetermined number of institutes and to describe and assess, in written reports, the current status of attention given in them to new instructional materials. A second approach to gathering data for this phase of the study involved use of a brief questionnaire sent to 371 content institute directors near the end of the Summer 1965 sessions.

A SUMMARY OF FINDINGS

General Characteristics of Institutes

1. Of the 36 institutes for educational media specialists, only two were offered at the Code 1 preparation level (providing advanced professional training for those possessing advanced degrees and a record of leadership, experience, and employment in the educational media field). Nine institutes were at the Code 2 preparation level--intended for applicants capable of demonstrating their present competence in one or more of the following: (a) selection and utilization of educational media, (b) curriculum development and coordination, (c) in-service education techniques, (d) production of educational media and materials, (e) organization and management of educational media services, and (f) research regarding educational media. The greatest number (25 in all) of institutes offered were for Code 3 participants--those possessing only minimal preparation and experience in media programs.

2. Of the 13 institutes for school library personnel included in the EMIE study because of their emphasis upon an expanded "instructional materials center" concept of the school library, three were at the Code 1 preparation level (for school library supervisors and/or school librarians possessing degrees in library science or

equivalent); five were Code 2 (for school librarians with 15 or more semester hours of library education); one was at the Code 3 preparation level (for school librarians with less than 15 semester hours of library education); and four were "mixed code" institutes (accepting applicants having various combinations of the qualifications just described).

3. Each of the 13 school library personnel institutes bore a specific program title. The following are examples: (a) University of Minnesota, "Development and Use of Multi-Media Library Collections"; (b) Queens College, "Elementary School Library Service for Disadvantaged Children"; (c) Boston University, "The Instructional Materials Center"; and (d) University of Wisconsin, "Changing Education and the Changing School Library."

4. Nine Summer 1965 educational media institutes offered advanced study in a particular aspect of the educational media field. The following are examples: (a) College of the Virgin Islands, "Educational Problems in the Virgin Islands"; (b) Pennsylvania State University, "In-service Training for Media Specialists"; (c) Columbia University, "Self-instructional Multiple Level Materials and Automated Instruction"; (d) Northwestern University, "Closed Circuit TV Production"; and (e) Arizona State University, "Production of 8mm Self-instructional Film."

5. The median length of educational media institutes was seven weeks (range three to eight weeks); the median length of librarianship institutes was six weeks (range five to eight weeks). Starting and ending dates of both types of institutes tended to coincide with summer session calendars.

6. The 36 educational media institutes were distributed geographically in 25 states (including Hawaii) and the Virgin Islands. Thus, half the states were without them. One state (New York) had four such institutes, Ohio three, Illinois three, California two, North Carolina two, Indiana two. The 13 librarianship institutes included in this study were distributed in 10 states. Of these, three were in Texas and two in New York.

7. The 36 educational media institutes enrolled 1377 students. The size of enrollments at individual institutes ranged from 20 to 95; the median enrollment was 40. The five highest state enrollments (i.e., total enrollments of all institutes conducted within a state) were: New York, 200; Ohio, 110; Michigan, 95; Illinois, 84; and North Carolina, 80. The five states contributing the highest number of participants to educational media institutes offered anywhere in the United States, on the other hand, were: New York, 123; Ohio, 111; Michigan, 90; California, 72; and Illinois, 68. Residents from every state were enrolled in at least one educational media specialist institute. Ten states (and the Canal Zone) contributed four or fewer participants; 12 states (and Puerto Rico) contributed five to nine; and six states contributed 10 to 19 participants.

8. The 13 librarianship institutes enrolled 470 students. Individual institute enrollments ranged from 25 to 50; as in the case of the educational media institutes, the median enrollment was 40. The two highest state enrollments (i.e., total enrollments of all institutes conducted within a state) were: Texas, 100; and New York, 85. These two states also contributed the highest number of participants to librarianship institutes offered anywhere in the United States (Texas, 77; New York, 49). Together, the 13 institutes enrolled at least one participant from all but four states.

9. The educational media institutes, considered together, tended to enroll individuals coming from within their own states (67%). In contrast, librarianship institutes were found to enroll a majority (56%) of their participants from out of state.

Characteristics of Students

1. Seventy-eight per cent of the 1363 educational media enrollees sampled (of a total of 1377) were men; 22% were women. The median age of both sexes was about 38. Of the 470 participants enrolled in the 13 librarianship institutes sampled, 13% were men and 87% women. The median age of both sexes, in this instance, was about 45. Approximately 82% of the media specialists and 63% of the librarians were married.

2. Approximately 88% of Code 1, 73% of Code 2, and 52% of Code 3 participants in educational media institutes held a master's degree; in many instances (78% in Code 1, 59% in Code 2, and 41% in Code 3), they had completed additional graduate work beyond it. Approximately 91% of Code 1, 40% of Code 2, and 10% of Code 3 participants in the librarianship institutes held the master's degree; 53% of Code 1, 31% of Code 2, and 10% of Code 3 had completed additional graduate work beyond it.

3. The median number of semester units of graduate work completed by educational media participants was 56 for Code 1, 45 for Code 2, and 35 for Code 3. In the case of librarianship participants, the median number of such units was 45 for Code 1, 28 for Code 2, and 13 for Code 3.

4. Almost all educational media and librarianship institute participants proved to hold at least one (and many two or more) credentials or certificates. Educational media institute participants typically held an elementary and/or secondary teaching credential; about 25% held a principal's credential. Within five years, approximately 40% expect to obtain a principal's and/or supervisor's credential. Approximately 88% of Code 1, 83% of Code 2, and 30% of Code 3 participants in librarianship institutes held a librarianship credential; more than half of each code group held a secondary teaching credential; more than a fourth of each group also held an elementary teaching credential.

5. About 85% of all participants in both educational media and librarianship institutes expect to continue with graduate study. Institute directors believed generally that institute experiences stimulated interest in further graduate study.

6. Except for a basic (first) course in audio-visual education, few Code 3 participants in educational media institutes had completed "educational media" courses prior to enrollment in the institutes. An average of less than a third of Code 2 participants and half of Code 1 participants had previously completed the three top-mentioned courses (administration, utilization, and graphics production). Other courses were mentioned only infrequently. Only about 12% of the participants had completed one or more courses in any areas of "librarianship." In the case of the librarians, as might have been expected, "librarianship" (all areas) was listed most frequently as having been completed prior to the institute session (85% of Codes 1 and 2;

53% of Code 3). Approximately half of Codes 1 and 2 and a quarter of Code 3 librarianship participants had completed a basic audio-visual course. Only a surprisingly small number had completed any other "educational media" courses.

7. Differences were noted in the present and long-term employment plans of educational media and library personnel. The present employment of 25% of Code 1, 28% of Code 2, and 58% of Code 3 educational media specialists is at the single school level; for the librarians it is 50% of Code 1, 65% of Code 2, and 67% of Code 3. The present employment of 50% of Code 1, 45% of Code 2, and 30% of Code 3 media specialists is at the district level; for librarians it is 34% of Code 1, 24% of Code 2, and 10% of Code 3. Future plans of participants indicated that a greater percentage of media specialists than librarians expected to obtain employment at the district level, whereas for the single school this ratio was reversed.

8. The percentage of membership in various educational media-oriented professional groups was uniformly lowest among Code 3 and highest among Code 1 educational media and librarianship groups. Memberships of both groups were highest for state organizations, followed, in order, by those at national and county or district levels. Among educational media participants, membership in DAVI was shown to be 68% for Code 1, 49% for Code 2, and only 19% for Code 3. Among librarianship participants, Department of Audiovisual Instruction percentages were only 5% for Code 1, 3% for Code 2, and none for Code 3. On the other hand, 62% of Code 1, 17% of Code 2, and 3% of Code 3 librarianship institute participants were members of the American Association of School Librarians, while only 3% of participants in all code groups in educational media institutes belonged to this organization. It thus seems apparent that there is little cross-membership between "audio-visual" and "library" groups represented in the institutes studied.

9. Generally speaking, participants in both types of institutes reported they expected to spend more time during 1965-66 in "educational media activities" than during 1964-65.

Instructional Staff

1. For educational media institutes, the median total "instructional staff" (defined as professional staff members engaged as instructors but not including administrative, technical, guest lecturer, consultant, or graduate assistant activities) was determined as 2.83 (full-time equivalent). For the librarianship institutes, the median was 2.20 (FTE). In the case of the educational media institutes, the median number of "local" (as opposed to "visiting") staff was 1.50 (FTE); for librarianship institutes it was 1.00 (FTE). The educational media institutes employed a median 1.00 (FTE) "visiting" faculty; librarianship institutes employed 2.00 (FTE).

2. The median student-to-faculty ratio for educational media institutes was 12:1; for librarianship institutes it was 14:1.

3. Specific points described by on-site visitors as contributing importantly to the success of institute instructional programs included the following:

- Proper balance in the use of "full-time" vs. "short-term" staff. While short-term visiting staff members often provided needed stimulus and specialized knowledge, full-time staff were needed to provide continuity in the instructional program and to maintain student-faculty rapport.
- Appropriate use of guest lecturers and/or consultants. Observers cautioned that in advance of their appearance guest lecturers should be briefed on emphases desired in their presentations and be informed of materials already covered or still to be covered by groups with whom they are to meet. "Too many guest lecturers," "duplication of coverage," or "irrelevant, off the point" were the most common criticisms of guest lecturers. Students also regretted the fact that guest lecturers were on hand for too short a time to "pick their brains."
- A well-rounded staff. On-site visitors emphasized the desirability of having the institute staff include one or more theorists and researchers, as well as established practitioners.
- Appropriate and varied instructional procedures. On-site visitors reported a tendency on the part of institute instructors to make excessive use of the "lecture" technique and of consequent "sit and listen" activities.
- Exemplary demonstrations. Well-planned, well-executed uses of new educational media were regarded as especially essential.

Instructional Program

1. Objectives for Code 3 single building type educational media and all librarianship institutes varied as to content and quality. Some were quite specific; some were excessively broad; some reverted to simple descriptions of course content. But the majority used statements describing anticipated behavioral changes similar to those included in Bloom's Taxonomy of Educational Objectives: Cognitive Domain.

2. Code 3 educational media (single building) institutes emphasized most frequently in their statements of objectives activities related to: (a) organization and administration of in-service education programs, (b) coordination of media with the school curriculum, (c) administration and organization of educational media programs, (d) evaluation and selection of educational media, and (e) production of simple instructional materials. Librarianship institutes, on the other hand, most frequently emphasized (a) recent curriculum and educational developments and their influence on the school library, (b) organization and administration of school library programs, (c) evaluation and selection of instructional materials, and (d) utilization of educational media.

3. Course descriptions for the two types of institutes reflected these same similarities and differences. The most frequently described educational media institute courses (for Code 3, single building, groups) were: (a) administration of audio-visual services, (b) production of simple materials, and (c) utilization-selection-evaluation of educational media. In the programs of seven library institutes offering separate courses, the most frequently mentioned course dealt with "the administration of library programs."

4. In an evident attempt to avoid the disadvantages of "atomization," a number of educational media and librarianship institutes (four of each type) offered, in place of separate courses, a series of integrated blocs of instruction, intensive in nature but each of relatively short duration, organized around some central focus (production of simple materials, television fundamentals, and the like). Team teaching was frequently used with these programs.

5. Educational media institutes tended to emphasize "production" activities in their instructional programs. These were largely omitted from librarianship institute programs.

6. On-site visitors to both types of institutes expressed general approval of the level and quality of instruction observed. They reported that while theoretical emphases seemed to appeal to the broadest range of participants, there was considerable demand by students for more time in which to complete special projects of a more practical (or "applied") nature.

7. On-site visitors also recommended that institute directors develop courses designed specifically for the institute program rather than just to use existing courses that "seem to fit." Courses combining both regular summer session and institute students were less well received by institute participants than those limited exclusively to, and developed especially for, institute enrollees.

8. On-site visitors generally favored a more loosely structured instructional program in contrast to one built exclusively around separate, formal courses. They also favored: (a) more individualization of instruction, where feasible and possible, despite the fact that this might require increased staff and budget; (b) a close relationship between institute objectives and instructional program; and (c) smaller classes and larger staffs, in general, than those observed in most Summer 1965 institutes.

Selection of Participants

1. Summer 1965 educational media and librarianship institute directors were somewhat disappointed in the pre-institute level of professional preparation and experience of participants. Media institute directors were especially concerned about participants' lack of basic production skills and knowledge.

2. Institute directors of both types were also concerned about the unexpected heterogeneity of participants with respect to experience, professional preparation, ability, and interests. Perhaps more than any other factor, this heterogeneity necessitated numerous changes in original plans (scheduling, grouping, activities, and assignments). Directors stressed two possible solutions to this problem: (a) define selection criteria more specifically and apply them with greater care, and (b) provide more flexibility in the instructional program itself (individualized projects, small group assignments, increased staff size to permit more individual attention, use of advanced students to assist in instruction of those less advanced in the field, and the like). On-site visitors tended to agree with these suggestions.

3. There was less agreement between educational media and librarianship directors with respect to the influence of geographical diversity upon institute programs. Librarianship institutes, generally more diversified geographically than the media institutes, tended to consider this diversity an asset. Media institute directors were less agreed on this matter, as were the on-site visitors who observed their programs. Media institutes emphasizing some "special" aspect of the field (8mm film production, for example) seemed to be capable of accepting and satisfactorily adjusting to participant groups of varied geographical composition. On the other hand, institutes emphasizing local or state solutions to media problems (and drawing examples and resource personnel from state, county, and local organizations), appeared to have been handicapped to some extent by mixed, multi-state enrollments.

Changes in Students

1. Prior to the institutes, a majority of both educational media and librarianship participants assigned a "high importance" rating to the statements of broad goals included in the PERSONAL INFORMATION REPORT FORM: SECTION II, INTEREST INVENTORY (BROAD GOALS) used with 1363 educational media and 470 librarianship participants. But they also estimated their present competence with respect to those goals as "minimal." An average of 69% of all educational media and 62% of all librarianship institutes rated the importance of these same goals, taken together, as "high," while an average of only 37% of all educational media and 34% of all librarianship participants estimated their competence with regard to them as better than "minimal."

2. Comparison of pre- and post-institute estimates of competence for both groups, however, indicated a growth in competence with respect to each broad goal. Following the institutes an average of 83% of all media and 69% of all library institute participants estimated their competence for all broad goals, taken together, as better than "minimal."

3. Prior to the institutes, participants in media and librarianship institutes rated the personal importance of these same broad goals. Following the institutes, both groups again rated their importance for anticipated 1965-66 school assignments. There was a positive correlation (rho=.96) between these pre- and post-institute ratings.

4. Specific goals appearing in the PERSONAL INFORMATION REPORT FORM: SECTION III, INTEREST INVENTORY were organized into four groups of related items. Those in List A were concerned with the production of instructional materials; List B related to analysis and appraisal of instructional materials; List C dealt with teaching with instructional materials; and List D dealt with the administration of media programs. Results showed:

- Approximately 31% of all media and 23% of all librarianship institute participants rated their pre-institute interest in List A (production) activities as "high"; 34% and 28%, respectively, rated their pre-institute skill and knowledge with respect to these same items as better than "minimal." Approximately 58% of educational media and 37% of librarianship participants rated their post-institute knowledge and skill with respect to List A activities as better than "minimal."
- About 41% of all media and 52% of all librarianship institute participants rated their

interest in List B (appraisal) activities as "high"; 48% and 53%, respectively, rated their pre-institute skill and knowledge with respect to these same items as better than "minimal." Approximately 77% of educational media and 78% of librarianship participants rated post-institute knowledge and skill with respect to List B activities as better than "minimal."

- Some 51% of media and 47% of librarianship institute participants rated their interest in List C (teaching) activities as "high"; 48% and 46%, respectively, rated their pre-institute skill and knowledge with respect to these same items as better than "minimal." About 79% of educational media and 69% of librarianship participants rated post-institute knowledge and skill with respect to List C activities as better than "minimal."

- Approximately 51% of media and 46% of librarianship institute participants rated their interest in List D (administration) activities as "high"; 22% and 23%, respectively, rated their pre-institute skill and knowledge with respect to these same items as better than "minimal." Some 62% of educational media and 47% of librarianship participants rated post-institute knowledge and skill with respect to List D activities as better than "minimal."

5. Analysis of data resulting from the use of SECTION II and SECTION III of the PERSONAL INFORMATION REPORT FORM suggests the feasibility of isolating, prior to the institutes, certain "high interest-low skill or knowledge" items to be emphasized in institute objectives and learning activities.

6. Using the McLAUGHLIN INSTRUCTIONAL COMMUNICATIONS EXAMINATION (purportedly a test of basic knowledge of educational media), statistically significant differences were found, prior to the institutes, between Code 1, 2, and 3 educational media groups as well as between librarianship and educational media groups as a whole. These same differences existed at the end of the institute period between Code 1 vs. Code 2 and 3 and for educational media vs. librarianship groups as a whole. However, the difference between the post-institute test scores of Code 2 and Code 3 media participants was not significant.

7. Post-institute scores of this information test were significantly higher than pre-institute scores of all groups studied. These findings suggest that learning, as measured by this test, actually occurred in the various institutes.

8. Pre-institute data obtained through use of the Ramsey CONTROVERSY IN ACADEMICIA attitude scale showed that Code 2 and Code 3 educational media institute participants had higher mean "sympathy" scores (denoting positive attitudes toward utilization of educational media for instructional improvement) than either Code 1 or "special aspect" media institute participants, and that they, in turn, had higher "sympathy" scores than librarianship institute participants. In librarianship institutes, Code 2 participants revealed a higher mean "sympathy" score than Code 1 participants. No Code 3 group was studied.

9. Pre-institute attitudes toward new media, as measured by the Ramsey scale, were highly variable, both within individual institutes and between various institutes and code groups.

10. Institute experiences produced, for the 15 sampled institutes taken together, a statistically significant gain in "sympathy" toward utilization of new media for instructional improvement. Large and small gains, without discernible pattern, occurred within individual institutes and within all three educational media code groups. No library institutes were studied on a post-institute basis. Post-institute variability (both within individual institutes and between code groups), as measured by the Ramsey scale, decreased after institute experiences.

Budgets

1. The median total budget figure for educational media institutes (exclusive of participant stipends) was $27,000; for librarianship institutes the figure was $19,000. Median costs per week for the single enrollee were $115 for educational media institutes and $99 for librarianship institutes. The range of these same costs was from $63 to $233 in educational media institutes, and from $61 to $178 in librarianship institutes.

2. The percentage of total budget expended on staff salaries (instructional and administrative-supportive) was 68% for educational media institutes and 77% for the librarianship group.

3. Analysis of final reports of directors of both educational media and school librarianship institutes showed that they were satisfied with budget arrangements, as developed for Summer 1965 programs, with the following exceptions: (a) rules should permit the renting of needed equipment not readily available through the sponsoring institution, (b) funds should be allotted to purchase a special collection of published materials related to institute emphases, and (c) similar allotments should be permitted for additional technical and/or graduate assistants.

Administration

1. On-site visitors reported a number of factors as detracting from the quality of institute administration: (a) shortage of materials, (b) unanticipated changes in staff assignments, (c) delays in receiving subsistence checks, (d) inappropriate scheduling of outside speakers, (e) equipment failures, and (f) insufficient or inadequate physical facilities.

2. Adequate communication among institute administration, staff, and participants was regarded as essential. Handbooks, newsletters, staff conferences, "gripe sessions," coffee breaks, critiques, weekly conferences, office hours, the use of suggestion boxes and "suggestions chairmen," and the housing of staff members with institute participants were all recommended as means of achieving this communication.

3. Well-planned logistics--sufficient supplies of materials and equipment in the right places at the right times--were found to be essential to a successful institute. The use of qualified individuals to coordinate instructional materials, equipment, and supplies for the entire program seemed to produce best results.

4. Relationships of institute directors with administrative officers of the host institutions were generally regarded as excellent. Although the lateness with which Summer 1965 institutes were authorized and budgeted presented many difficult problems, local administrations appeared to have moved promptly in solving them.

Instructional Resources

1. Instructional resources of educational media institutes were generally rated high. On-site observers were less enthusiastic about instructional resources available in librarianship institutes, however, because they tended to be less varied and more heavily weighted toward printed media.

2. Directors stressed the value of placing the institute library in a space adjacent to institute classrooms rather than at some distance across campus. While this arrangement would normally require additional funds for materials purchases, such costs were thought to be justified.

Physical Facilities

1. On-site visitors regarded the provision of highly adequate physical facilities as being of paramount importance to institute success--particularly of those dealing with educational media and problems of school librarianship.

2. Directors stressed that institutes are pre-emptive of facilities and space, or should be. Holding an institute on a campus is quite a different thing, from the point of view of demands on facilities, than simply teaching a number of courses.

3. Most institutes visited by EMIE observers were housed in adequate facilities. Several that met the highest standards served as inspirations to students and visitors alike. In the relatively few instances in which facilities were judged to be less than adequate, the following factors were mentioned: (a) lack of provision for use of sophisticated technological devices, (b) poor ventilation or air conditioning, (c) insufficient number of individual working stations, (d) inadequate darkening control, (e) poor acoustics, (f) disturbance from nearby noisy activities, (g) inadequate electrical wiring, and (h) conflicts with non-institute students regarding scheduled uses of facilities.

Living-Dining Arrangements

1. Reactions of on-site visitors to institute dining arrangements were excellent. Good quality food was available in ample quantities and at reasonable prices. Dining environments were generally pleasant and offered excellent means of increasing student-student and student-faculty intercommunication.

2. Reactions of on-site visitors to observed living arrangements were more varied. Generally speaking, on campuses in which they were provided by the institution, living facilities were generally described as "adequate" or "average." However, in only one institute visited was there an expression of serious dissatisfaction--and that because of a lack of air conditioning.

3. Approximately 32% of the educational media institute participants and 20% of the librarianship participants did not live in campus dormitories. A large number of these individuals could be accounted for in connection with institutes in which all, or nearly all, enrolled were "commuters."

4. On-site visitors believed strongly in the value of dormitory life in encouraging deeper involvement in and satisfaction with institute experiences. Almost all directors also agreed that student performance, rapport with staff and fellow students, and commitment to the program were greater for on-campus participants than for commuters. Most directors would therefore appear disposed to discourage commuters and, in some cases, to recommend against even weekend commuting home.

5. Only a few of the institutes reported there was sufficient time to assist married participants in finding living accommodations for their families.

Content Institutes

In-person visits to a sample of four institutes in each of four content fields (history, geography, English, foreign languages) and to four institutes for teachers of disadvantaged youth, plus analyses of 286 questionnaires returned from a mailing to 371 institute directors in these five fields, provided data for several observations concerning attention given in these institutes to "new instructional materials," as follows:

1. Content institutes were giving at least some attention to "new instructional materials" in their programs of study and activities. The quality and frequency of that attention varied considerably--ranging from "very little" and "poor" to "considerable" and "good." Generally speaking, the attention to new materials observed by on-site visitors was far below the level considered to be possible and desirable for the fields concerned.

2. While questionnaire returns from content institute directors indicated that "considerable" attention was given to new instructional materials through special exhibits, special demonstrations, special preview sessions, and source lists describing materials availability, on-site visitors' findings were not nearly so optimistic. If the sample of institutes visited could be considered as typical of the fields concerned, the actual attention to new materials must be rated generally as rather poor.

3. In most instances, on-site visitors reported that institute directors were not aware of the full scope and variety of available new instructional materials applicable to needs of elementary and secondary school teachers and students.

4. Some confusion actually existed with respect to the appropriateness of spending class or study time of graduate students enrolled in institutes for purposes of reviewing new instructional materials produced primarily for high school or elementary school use.

5. A large majority (257 of 286) of the content institute directors indicated their interest in attending an "institute for institute directors," were one to be offered for them, at which approximately a week (the favored maximum length of time) would be set aside for the purpose of improving their familiarity and skill in selecting and using new instructional materials, technological equipment, and related techniques appropriate to their special fields. Only 10% of those replying indicated they were not interested in this opportunity.

6. "Providing laboratory facilities" in which enrollees were aided in developing skill in producing simple instructional materials (charts, large transparencies, slides, flat picture sets, displays, and the like) received the lowest rating of the five so-called "instructional materials activities" included in the questionnaire.

7. Much of the actual utilization of new materials actually observed by on-site visitors was unimaginative and routine and probably did little to suggest by model the best patterns or the full potential of using the materials involved.

R RECOMMENDATIONS

1. There is an urgent need to clarify goals of the profession represented by the educational media generalist or specialist and to identify kinds of services to be rendered by and competencies required of such individuals at various levels of the educational hierarchy. The Department of Audiovisual Instruction and the American Association of School Librarians (to name only two organizations concerned) should work together to achieve this clarification and to aim toward cooperation, rather than competition, in preparing persons to render these services. Future institute proposals should be assessed on the basis of their potential contributions toward achieving such goals.

2. It is essential to have as many (and preferably more) educational media specialist and school librarianship institutes for future years of the current National Defense Education Act as were approved for Summer 1965 (assuming good proposals). Certainly, if the new skills and insights developed by teachers through large numbers of "content" institutes are to be put into effect in the schools, backstopping will be required to increase the numbers and to improve the qualifications of more and more educational media (and librarianship) personnel.

3. Better lines of communication should be established between "media specialist" and "school librarianship" institutes. Cross-fertilization should be effected through several means: (a) use of some library specialist teaching personnel in media institutes and of some media specialists in library institutes, as appropriate, (b) greater flexibility in standards for admission to librarianship institutes so as to permit media specialists without previous library training to enroll, and (c) greater clarification of the unique, yet complementary, functions to be performed by educational media and librarianship institutes in upgrading the professional preparation of educational media generalists.[1]

4. Many different kinds and levels of leadership are required for the educational media field. Opportunities for providing that leadership through NDEA institutes are necessarily limited. To employ these relatively few opportunities to best advantage, more Code 1 (advanced leadership) institutes should be funded--as a sufficient number of qualified applicants become available--without at the same time neglecting the very important Code 3, "beginning" type institutes that contribute importantly in identifying persons of professional promise in the field. Differences in content, emphasis, and level between the so-called "advanced" and other types of institutes should be real and clearly defensible.

5. Selection of participants is critically important to the success of institutes. Special attention must be given to: (1) identifying young, promising, and capable applicants; and (2) assigning them to institutes most closely related to their levels of training and experience, their professional goals, and their academic ability. Consideration should be given to the desirability of inviting key individuals to apply for institute assignments best suited to their potential and job situations. There is some reason to believe, also, that selection of participants should be based more on ability than upon job function and that both achievement and interest tests should be used to assist with the selection process. Special attention should also be given, in selecting participants, to the potential advantages and disadvantages of diversity with respect to geographical origins, job assignments, previous education, and experience. Some kinds of diversity are believed to contribute to institute effectiveness; in other situations, homogeneity is essential.

6. Special care should be taken to spell out the objectives and scope and content of institutes in advance information leaflets circulated to advertise them. Required qualifications for participants also should be determined carefully and explained fully so as to insure a good "fit" between what applicants want and what institutes have to offer.

7. NDEA institutes are a significant means of improving the professional level of educational media personnel throughout the country, but there are other well-established means to achieve similar ends. Full, complementary use should be made of regular programs of graduate study in the field. Capable students discovered through participation in institutes should be encouraged to continue working in such programs to complete graduate degrees and specialized credentials or certificates.

8. Institutes for educational media specialists should be models with regard to the quality

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[1] The majority (53%) of librarianship institute participants were found to be planning to continue working at the single school level. This is contrasted with a figure of 74% of educational media specialist institute participants who, within five years, expect to be working at the district level. These facts suggest that if both groups are to be enabled to obtain the generalist background needed to perform duties at either of these levels, both will need some of the other's kinds of experiences and training. The single school librarian who serves without the assistance of an educational media specialist must therefore gain competence (not merely "exposure") in the "media" field; on the other hand, the media person who seeks a generalist leadership position at the district level will require extensive training in so-called "library" as well as "new media" fields. The seriousness of this problem is reflected in two ways: (1) by the fact that only 12% of the Summer 1965 educational media specialist enrollees had completed one or more graduate courses in the field of librarianship and only 50% of the librarians had completed even a basic audio-visual course (and very few had taken other courses in "new media" fields); and (2) by the fact that only 3% of the educational media specialists belonged to AASL and only 3% of the librarianship institute participants belonged to DAVI.

of objectives, instructional programs, teaching staffs, facilities, and resources. In awarding contracts, such considerations should far outweigh those of political expediency or of other factors unrelated to quality. If necessary or desirable to achieve high standards, certain outstandingly equipped institutions should be invited to negotiate contracts for conducting desired types of institutes.

9. Consideration should be given, with future media or librarianship institutes, to the possible advantages of using public school (rather than university or college) facilities similar to those in which participants are likely to be carrying out their work. Certain of the recently enacted federal assistance programs for education that call for summer operation of selected public school programs should facilitate their concomitant use for media or librarianship institutes.

10. At least a few institutions of higher learning should be encouraged to propose institute plans involving contracts for periods of two or three years rather than one. Such programs should then be evaluated to ascertain effects of these arrangements upon staff quality and proficiency, program effectiveness, and student commitment to the profession.

11. Advanced program planning is essential, yet over-structuring must be avoided. There must be reasonable flexibility of program that permits groups to pursue some obviously worthwhile goals not fully anticipated in preliminary planning.

12. Follow-up contacts should be maintained with those completing media institute programs. This is properly a joint responsibility of institute directors, the Department of Audiovisual Instruction (DAVI), the American Association of School Libraries (AASL), the Association of Chief State School Audiovisual Officers (ACSSAVO), and others. Invitations to membership in appropriate professional organizations should be extended to those completing institute programs.

13. Many different kinds of instructional resources are needed to facilitate the study of media problems--especially those included in programs of advanced Code 1 institutes. Two things especially are needed: (1) an up-to-date listing of suitable, presently available educational media of all types closely related to the content and emphases of educational media and librarianship institutes, and (2) determination of gaps in such offerings that might be filled by commercial producers or through cooperative action of institute directors themselves. Notably lacking are case studies dealing with actual budgets and budget problems, data processing and automated materials management, staff improvement programs, and the like. Perhaps next year's directors of institutes should include in their budgets sufficient funds to permit a variety of cooperative activities (including a series of pre-institute planning meetings by code types) in developing and exchanging suitable materials related to such problems.

14. Leadership rosters should be developed to furnish names and personal data for individuals qualified to serve as: (1) "new materials" specialists to provide instruction or logistical services for content institutes throughout the country, and (2) instructors in educational media specialist or school librarianship institutes--especially those at the advanced Code 1 level. Properly, DAVI and AASL should take the lead in developing these rosters.

15. Special short-course institutes (of perhaps a week's length) should be offered during the academic year for directors of institutes serving content fields (including librarianship). These institutes should be aimed at informing directors about the availability, selection, and proper uses of appropriate "new instructional materials and devices." Professional educational media, librarianship, and "methods and materials" personnel should comprise the staffs of such institutes.

16. Representatives of the educational media profession should offer assistance to their colleagues on their own campuses in preparing institute proposals containing "new media" emphases in other content fields. They should also volunteer close association with institutes actually approved for their campuses. Some large-group presentations and demonstrations of "new media" matters might be conducted, for example.

17. More attention should be given to experimenting with flexible scheduling, more problem-solving and application activities, and more small group and fewer "sit and listen" lecture sessions in educational media and librarianship institutes. Although such changes might be expected to require larger institute staffs, more instructional space and facilities, and increased quantities of instructional resources, their costs would probably be justified.

18. Special attention should be given to problems arising from the fact that under present arrangements NDEA institutes for educational media and librarianship personnel cannot be offered in some parts of the country where the needs are perhaps the greatest. This is because the staff, facilities, and proposed programs of applying institutions in these locations cannot compete with institutions having better financial support and more experience in the field. Perhaps it might be possible to work out "sister institution" arrangements between institutions having established programs and those without them. This program could involve such things as: (a) joint or exchange teaching assignments in both institutions, (b) special consulting and assistance with program development, and (c) foundation or federal financing to improve physical facilities and resources in the inexperienced institution.

EMIE

EDUCATIONAL MEDIA INSTITUTE EVALUATION PROJECT

434 East William Street, San Jose, California, 95112